

**U. S. Environmental Protection Agency  
National Advisory Council for  
Environmental Policy and Technology**

**Meeting Minutes**

**Radisson Hotel Old Town Alexandria  
901 North Fairfax Street  
Alexandria, VA 22314**

**November 8 - 9, 2000**

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***Wednesday, November 8, 2000***

***Council Attendees:***

Mr. Robert L. Rhodes, Jr., Holland and Knight, LLP (*Council Chair*)  
Ms. Wilma Subra, Louisiana Env'l. Action Network (*Council Vice Chair*)  
Dr. Carlos H. Arce, NuStats Research & Consulting  
Mr. Gary W. Ballesteros, Rockwell International Corp.  
Ms. Patricia Bauman, The Bauman Foundation  
Ms. Dorothy Bowers, Merck & Company, Inc.  
Dr. D. Randall Brandt, Burke, Inc.  
Ms. Kirby A. Dyess, Intel Corporation  
Mr. David Fees, Delaware DNREC  
Mr. Mark Greenwood, Ropes & Gray  
Dr. Frederick B. Henderson, III, HENDCO Services  
Ms. Linda Hixon, North Chickamauga Creek Conservancy  
Mr. Charles Jones, Douglas County Kansas  
Mr. J. Leonard Ledbetter, Law Engineering & Env'l. Services, Inc.  
Mr. David Marsh, Marsh Plating  
Hon. Bernard D. Rostker, US DOD  
Ms. Carrolle A. Rushford, Rushford and Associates  
Dr. Joseph Sullivan, Virginia Polytechnic Institute & State Univ.  
Mr. Richard Sustich, Metropolitan Water Reclamation District of Greater Chicago  
Dr. Valerie Petit Wilson, Tulane University Medical School  
Ms. Patricia K. Wood, Georgia-Pacific Corporation

***Consultants:***

Dr. Jim Ehrmann, Meridian Institute  
Ms. Barbara Stinson, Meridian Institute,  
Mr. Steven Kenney, Toffler Associates

***EPA Representatives:*** Ms. Gwen Whitt, NACEPT/DFO

Mr. Derry Allen, OPEI  
Ms. Sonia Altieri, OCEM  
Mr. Michael Brody, OCFO  
Mr. Brion Cook, OEI  
Ms. Anita Hanson, OCEM  
Mr. Clarence Hardy, OCEM  
Mr. Hale Hawbecker, OGC

Ms. Anita Street, OCFO

Mr. Keary Weiss, OARM

Mr. Alex Wolfe, OCFO

Mr. David Ziegele, OCFO

Mr. Robert L. Rhodes, Jr., Chair, welcomed the Council members, EPA representatives, and members of the public to the meeting. He gave a brief overview of the agenda (copy attached).

### ***Presentations***

#### **Requirements of Federal Advisory Committees - Mr. Hale Hawbecker, EPA/OGC**

The purpose of Mr. Hawbecker's presentation was to discuss the legal requirements of the Federal Advisory Committee Act (FACA). He noted that each member received a copy of the March 1998 memorandum that summarizes the FACA requirements. The FACA was first introduced in 1982 for the purpose of obtaining a listing of the Federal Advisory Committees, to ensure public accountability, and to have meetings open to the public. The FACA imposes three requirements for Federal advisory committees:

- C Membership must be balanced in representing the various interest groups and constituencies, and more recently, by race, ethnicity, and gender diversity;
- C A notice of an advisory committee meeting must be published in the Federal Register 15 days prior to the meeting date, and include the committee's name; the time, place, and purpose of the meeting; a summary of the agenda; and a statement indicating whether the meeting will be closed or open to the public;
- C Minutes must be kept of all advisory committee meetings.

Mr. Hawbecker stated that most advisory committee meetings are open to the public who can also present written or oral statements. Exemptions to open meetings are allowed for national security purposes, privacy interests, and confidential business. Committee workgroups are exempt from the chartering requirements; however, they are encouraged to follow the requirements pertaining to balance and open meetings. Workgroups are advisory to the advisory councils or committees who in turn are advisory to the Agency. Only the chartered or parent advisory council is authorized to give advice directly to the Agency. Service on an advisory committee is at the pleasure of the appointing person.

Lobbying restrictions: EPA is not allowed to orchestrate a grassroots lobbying campaign or spend significant resources to help people lobby Congress for the Agency. Advisory Council members were requested not to lobby on Capital Hill on the same days they are in Washington, D.C. for committee business. Members can lobby as a private citizen, but not as a representative of the Agency. If individual members are asked to represent the Agency on an issue before Congress, they must receive clearance from the EPA's Congressional and Legislative Affairs office.

Advisory committee members are not subject to conflict-of-interest rules and standards of ethical conduct as are Federal employees, but the Agency encourages members to refrain from participating in matters

that affect themselves or their employees. Mr. Hawbecker explained that this type of conflict would include a grant, license, application or a permit related to their personal holdings or interests.

The balanced nature and diversity of interests of the advisory committees help to ensure that recommendations will be consensual in nature and represent a balanced viewpoint. A consensual or unified recommendation should be the goal of each advisory group. Members dealing with any foreign governments should register under the Foreign Registration Act. Anyone who needs to register should contact Gwen Whitt, the Designated Federal Officer (DFO) for this Council.

#### Questions and Comments on Federal Advisory Committee Requirements

Ms. Bowers asked if the workgroups could share their ideas with another EPA workgroup on certain issues before submitting them to the Council for review and comment?

Mr. Hawbecker responded that communications with EPA staff could take place. The staff is basically there to provide information to the workgroups about EPA's needs and priorities and that it is perfectly acceptable to consult with them on the workgroups' recommendations.

Mr. David Fees, asked whether the current Council members would be replaced if the Administration changes?

Mr. Hawbecker said that the members serve at the pleasure of the current Administrator; there is no requirement that they be replaced with a change in Administration. Until a letter is received saying that their services are no longer needed, the Council should carry on as the fully sanctioned group.

#### *Activities of the NACEPT Workgroups - Update*

##### **Integration of EPA's Key Planning Processes Workgroup - Mr. Robert L. Rhodes, Jr.**

Mr. Rhodes provided background on previous meetings with EPA senior management. The workgroup is focusing on the issue of integration as part of the Agency's overall strategic planning, information and technology planning, and human resources planning processes. During the September 2000 meeting, the workgroup proposed a multi-stage process that include acquiring base-line information on the Agency's attempt to integrate these planning processes. A qualified consultant serving as a facilitator would assist the workgroup with addressing the questions: "What do we mean by integration?" and "What are the important aspects of integration?" and according to the following:

- C Develop a definition of integration;
- C Validate the assumption that integration is an appropriate element in a multi-faceted planning process;
- C Develop a paradigm of a good integration program in a large agency; and
- C Facilitate a discussion with the responsible EPA senior managers in charge of the planning processes to determine the baseline condition.

Baseline conditions would be determined by answering the following questions:

- C What is the status of the three planning processes?
- C What effort has EPA used toward integrating these processes, and how were the efforts implemented?
- C What obstacles or other experiences has the agency had in regard to integration? and
- C How do these efforts compare with the paradigm?

The workgroup proposes to:

- C Suggest possible solutions to EPA for presentation and discussion during the Winter meeting of the Reinvention Action Council (RAC).
- C Engage in a facilitated discussion with the EPA senior managers at the Spring meeting followed with a brief report outlining possible ways to integrate the planning processes.
- C Initial discussions would occur with the key program office managers responsible for the three planning processes.
- C The workgroup plans to compare the paradigm and the baseline information, and suggest what can be done to bring them closer together.
- C Develop a plan and present it at the RAC's Winter meeting.

#### **Emerging Trends Workgroup - Ms. Linda Hixon**

Ms. Hixon reported on the workgroup's activities during the September 2000 meeting and in subsequent communications. The Workgroup developed an initial list of emerging issues and trends affecting EPA within the next five to ten years. Dr. Arce had prepared a draft process for the Workgroup to use in identifying emerging issues and trends. Other Workgroup members volunteered to write brief statements on a number of topics.

Ms Hixon listed the following major topics: CERLCA and product take-back; ecosystems management and global warming; international issues; geo-spatial information technology; holistic approaches; alternative dispute resolution; changing rhetoric from command and control; alternative strategies for problem pollutants; and emerging science issues.

The proposed activities of the Workgroup during this meeting will include the following:

- C A historical perspective on how EPA has conducted its strategic planning process by Mr. Alex Wolfe, EPA Office of the Chief Financial Officer (OCFO).
- C A presentation on the work of the EPA Alternative Futures group by Mr. Michael Brody and Ms. Anita Street (OCFO).
- C Mr. Steven Kenney, Toffler Associates will present an outside perspective and lead the Workgroup in a discussion to identify and prioritize emerging trends and issues.
- C The Workgroup will: prepare white papers, discuss and prepare an interim report, and make further individual assignments.

#### **Evaluation of EPA's Workforce Capacity Efforts Workgroup - Ms. Dorothy Bowers**

Ms. Bowers discussed the workgroup's charge which is to respond to the following questions:

- C How does the Agency's human resources efforts compare to those considered benchmarks in the private sector?

- C How can OARM integrate its strategic planning process with the Agency's strategic plan?
- C Is OARM doing enough in human resources planning to identify priorities?
- C Has EPA allocated the appropriate level of resources?
- C How can EPA compete effectively in attracting and retaining employees?

EPA actions in the future will depend on resources. The workgroup believes that it is critical to learn about workforce issues, and asked that the Honorable David Walker (Comptroller General) and Mr. Frank Cipolla from the National Academy of Public Administration (NAPA) talk to the Council about the human resource issues in the public sector.

Mr. Rhodes noted the overlap in this charge with the issues being addressed by the Workgroup on Integration. He felt that this was inevitable and not a problem if there is sufficient communication between the workgroups.

Mr. Hardy commented on the importance of the Council's work in helping EPA become more effective and do a better job of planning. The issue of technology and how it relates to human resources is an important concern of the Agency. He explained that the RAC is made up of senior career managers who will be able to interface with the political officers in the new Administration.

Mr. Henderson asked how the RAC works in terms of NACEPT's recommendations? Dr. Hardy responded that the RAC members address the budget and the Agency's environmental management. As such, this is the best group for NACEPT to interact with and make recommendations regarding continuous planning issues for the future.

#### ***Panel Discussion : "Human Resources Management in the Public Sector"***

##### **Honorable David Walker, Comptroller General, Government Accounting Office (GAO)**

Mr. Walker stated that people or "human capital" represents the Federal government's most valuable asset. At times, the Federal government has viewed people as a cost to be reduced, rather than an asset to be valued. The GAO has done a lot of work on human capital within the Agency and in the Federal government. In January, 2001, GAO will issue a report showing the Federal government to be at high risk for human capital. This risk is high because the full-time work force is smaller than it was in the early 90's, and some of the reductions have resulted in a loss of highly skilled management people.

Reductions have been achieved in several ways: Reductions in Force (RIFs) which are based primarily on length of service and are not based on skills, knowledge, performance or related to the agency's needs. Hiring freezes, reduction of performance awards, reducing training programs, and cutting back on enabling technology are some of the ways that the government has achieved reductions in human capital and other costs. Mr. Walker expressed concern that many agencies have mortgaged their futures in terms of carrying out their responsibilities.

The US Government is the largest, most complex, most diverse, and most important governmental entity globally. For this reason, it is important to be able to attract and retain top talented people. Many agencies are challenged because they are smaller, out-of-shape, unbalanced in skills, and have significant

succession planning problems. The war for talent is intense especially in the information technology and scientific sectors which is important to EPA. While the Federal government has compensation differentials, it will never be able to compete with private salaries. Another problem is the wage compression at the top, because top executive pay is linked to Congressional salary increases.

Several actions taken by GAO to improve its workforce situation:

- C Made people the top priority in the Agency
- C Developed a human capital profile and a human capital strategic plan linked to the strategic plan
- C Filled out and published a self-assessment guide
- C Inventoried the skills and knowledge of employees
- C Redesigned training programs to increase employee's knowledge
- C Invigorated college recruiting programs
- C Changed the performance management and appraisal systems
- C Focused on succession planning

GAO has also:

- C Restructured to eliminate a layered hierarchy, trained people to work cross-boundaries, and focused more externally on the client and the public.
- C Reduced the number of field offices due to changes in information technology.
- C Achieved legislative reforms which allow for targeted reductions, targeted buy-outs and early-outs to realign the Agency based on skills, knowledge, and performance rather than tenure.
- C GAO has created a separate career path for non-managerial, scientific personnel which allows it to receive an SES-level pay scale.

The GAO has developed human capital tools to assist other agencies, such as a self-assessment guide; best practices report based on the private sector; and a list of questions for Senate confirmation hearings. He concluded by saying that many agencies face the same challenges which need to be addressed in the future.

**Mr. Frank Cipolla, Director, Center for Human Resources, National Academy of Public Administration (NAPA)**

Mr. Cipolla described the NAPA as an independent, Congressionally-chartered organization, that works with 60 Federal agencies through a consortium. He agreed with Mr. Walker that a lot can be done with the current legislation, Title V of the U.S. code; however, fundamental changes are needed in the legislation. This is because Title V is based on scientific management philosophies that are too restrictive.

He explained that there has been a major change in the last five years in human resources management toward embracing a human capital investment philosophy. The National Performance Review, the reinventing government movement, and the Government Performance and Results Act have provided considerable stimuli for agencies to make changes. Moving to an investment philosophy means moving away from a rule-driven mentality to one that focuses on entitlement and protection, and one that fosters investment in fundamental human resource management and human capital areas.



Some of these areas are recruitment and retention strategies, re-skilling employees, deployment and redeployment. In the last five years, managers have assumed more responsibility for human resources and human capital management. Agencies have also looked at alternate service delivery through outsourcing and sharing services with other agencies.

The most significant change needed is in the human resource management staff. The staff needs to assume new roles and new competencies, and to move away from restrictive specialist roles to a more consultative strategic mentality. The key to fundamental change is a focus on effective workforce planning, rather than on rules and compliance. The focus should be on workforce needs both for today and in the future.

Mr. Cipolla noted several conditions of today's workforce. The first was retirement eligibility because of the aging Federal workforce; this could be viewed as an opportunity to restructure positions. Downsizing has resulted in a number of younger persons leaving the Federal workforce. The resulting imbalance and gaps in skills makes effective workforce planning the key to a process that helps agencies rationalize their decisions about human capital investment.

The second condition was the need for better recruitment strategies. Agencies need to do a better job of articulating their stories in a way to appeal to today's workforce. The emphasis on long-term career employment as a primary benefit is not workable in today's market. The emphasis needs to be on what people can contribute. This is also true of the third condition, i.e., retention strategies. Agencies need to continually upgrade the skills and competencies of the workforce to meet mission changes.

The last point made by Mr. Cipolla was that agencies do not effectively measure the contributions of human resource management and human capital programs to mission accomplishment. Agencies need to adopt workforce planning programs that identify the competencies needed today and in the future, and that information could be used as a basis for building strategies on how to close the gap. A continual emphasis on workforce planning is needed to transform human resources management.

**Ms. Sandra Payne, Strategic Initiatives Coordinator, Office of the Director, U. S. Office of Personnel Management(OPM)**

Ms. Payne suggested action steps for improving human resources management. In the past year and a half she has lead the effort to reform civil service laws and has managed OPM's strategic planning process. (The OPM plan can be found at [www.opm.gov](http://www.opm.gov).)

Ms. Payne acknowledged that change is difficult because of the complex Federal laws and many diverse groups of people and perspectives that have to be considered in a public service. This is a good time to develop a strategic plan, because it was mandated by law and the underlying principles of good management will not change. There are 1.8 million Federal civil service employees whose jobs are not political and who will be on the job regardless of the change in Administration. Some changes have been proposed in the laws, but consensus has not been achieved.

The first and most important step is workforce planning, i.e., putting the right people with the right skills in the right job at the right time. This covers the entire spectrum of recruitment, training, retraining, and

retaining people. Human resources personnel can help their agencies do this type of planning, because they have been working on a model automated workforce planning system. It can be used as a tool for every governmental agency. The model will allow agencies to manipulate massive amounts of data on the demographics of their workforce to find out specifically where they need to target recruitment and retention. The model has been pilot-tested and will be available on the OPM website in a few months.

OPM has developed a new hiring tool for the intern program. This is a tool that every agency can shape and use in ways that best fit the agency. This program allows agencies to recruit new people, primarily at entry level professional positions for a two-year period with an emphasis on development and training. These new employees will be rotated to different positions in the agency for a two-month period alternating with two weeks of training. At the end of the two-year period, they can be converted into career appointments. This is an extremely attractive recruitment device and is helpful to the agency because they can rank people according to their abilities.

Ms. Payne alerted the Council to the latest possibility of repaying student loans, which should be finalized in a few weeks. She noted that this type of payment must be included in the agency's budget. Another strategy is the possibility of paying recruitment and retention bonuses, which also requires a budgeted item.

The problem with re-hiring former employees who have particular needed skills, is that they have to pay back their salary against their retirement income. OPM has recently given several agencies the authority to waive this requirement if they can show that the person has unique skills that are needed by the agency. OPM is also working on allowing employees who want to gradually reduce their full-time employment to part-time without having their retirement benefits negatively affected. Legislation is in place for the new Congress to consider.

The final point concerned the impact of good performance management. It is possible to fire people from Federal employment who are not doing their jobs adequately, but managers are reluctant to use this authority; they will receive training on how to handle these situations. Unfortunately, the training budget has been reduced and we need to find a way to increase efforts in training our employees to get the best return on our investment.

### **Discussion**

Mr. Walker explained the need for a cultural transformation of government, which is extremely difficult to achieve, whether in public agencies or private monopolized industries, such as utilities or communications. Cultural transformation includes what is done, how it is done, and how it is measured. The government must move from a hierarchical process to an inward focused entity that is results oriented, integrated, works across boundaries, and is externally focused. Human capital reform is essential to maximizing performance and assuring accountability.

He noted that some incremental changes have occurred or are in process within existing law, such as flexibility on compensation and in re-training and retirement, but ultimately civil service reform is needed. Modern management practices need to be brought into the Federal government. Because the government

is not growing, some merit principles are out-dated. The government needs to have reasonable flexibility to manage, to achieve results with adequate protection. The Federal government needs to be a model for diversity, non-discrimination, and inclusiveness.

He warned that there are strong opponents both within the legislative and executive branches to civil service reform. GAO reforms were achieved only with a high degree of persistence, perseverance, and pain

Mr. Cipolla expressed the following concerns:

- C The need for a merit system that is supported by a set of values, such as commitment, competence, quality performance, fairness and equity in relationships. There should be a debate within the government and each agency about the values underlying the human capital systems.
- C The need for succession planning. During the downsizing in the 90s, people ignored the principle of succession planning and are just now realizing its importance for executive development. Succession planning is important regardless of down-sizing, because of the aging Federal workforce. The most important advice the Council could give to the EPA would be how private industry succession planning is accomplished.

Ms. Payne stated that OPM has been downsized by 50% in five years time. OPM is looking at the employees in the middle-age bracket in terms of succession planning. The Department of Defense has done the best job of succession planning for their civilian workforce, due to their experience with the military workforce. One of the reasons DOD planning is a good model, is because it considers actual behaviors, not just the aspect of retirement due to aging.

Mr. Walker added that in determining when people are going to retire, it is important to look at the dual-salaried families desire to retire at the same time and the need to pay college tuition, which can help in retention.

Ms. Payne summarized the basic values behind the merit system as:

- C Hiring the best qualified people;
- C Providing training to all qualified staff, not just someone's favorites
- C Evaluating performance and rewarding good performance; and
- C Taking action when performance is poor.

### **Questions and Answers**

*Question:* Mr. Rhodes noted that in the private sector, change starts with a strong leader demanding change. He asked the panelist to give their perspective on that occurring in the Federal government.

*Response:*

Mr. Walker stated all branches need to be involved in making human resource capital planning a priority--

The Office of Budget and Management (OMB), the new President, Congress, and each agency. Continuity must come from senior level employees who are willing to focus on these issues for a number of years.

Ms. Payne said that the strategic plan required by the legislation includes human resource planning; however, new administrators need to be told by staff and advisory groups that human capital is needed to carry out any agency priorities. Mr. Cipolla agreed that the Government Performance and Results Act has provided a structure that allows new administrators to use the process to incorporate people skills with the agency's overall mission.

*Question:* Dr. Brandt asked whether their agencies are using a balance score card or outcome measures to evaluate whether they are achieving their human capital planning goals.

*Response:*

Mr. Walker stated that GAO has outcome measures that deal with the agency as a whole as well as individuals. One of the outcome measures is financial benefits or how much is saved in terms of dollars. For FY 2000, it was 23.1 billion dollars. Another measure is the extent to which GAO's recommendations are adopted that result in improved safety or security. GAO is revising its performance appraisal system to adopt a balanced score card concept. The system will be keyed to core competencies and tied to strategic planning and core values.

Ms. Payne responded that OPM has used a balanced score card in measuring results, customer service, agencies responses, and whether policies are working. While the OPM cannot use profit as a bottom line, the Agency has several reimbursable operations that can be evaluated in terms of money. Employee perceptions of items such as fair hiring practices and workplace support are also evaluated. It is particularly difficult to measure whether the human resources policies and practices in place are effective in helping agencies produce or implement their goals. OPM has asked for assistance with this type of measurement from NAPA and the Council on Excellence in Government, but they have not submitted an answer on how to measure human resources policies against agency performance.

Dr. Rostker commented that the Defense Department's work in human resource planning is research-based. On the military side, DOD has spent 10-20 million dollars on personnel-related research, including both experimental and non-experimental analysis of behavioral trends. A data center stores data on manpower which is available for analysis. He proposed a change in the retirement system to make it more flexible, as in private industry, so that highly-skilled people that are needed by the agency could phase slowly into retirement, but still be available for needed projects. Mr. Walker responded that GAO has recommended to Congress that the rules need to be modified to allow for phased retirement.

*Question:* Dr. Rostker asked if the agencies need to create and budget a position for someone in a supervisory position who wants to phase-into retirement? Mr. Walker answered affirmatively.

Dr. Rostker said that a third of the people being hired now are in their 40s and more flexibility is needed in EPA's hiring scheme to allow for above entry-level positions.

*Question:* Mr. Greenwood asked how can human resource planning be matched with an agency's mission, if the mission and the plan are constantly changing and evolving?

*Response:*

Ms. Payne stated that the system needs to allow for change and the workforce planning and strategic planning processes need to be integrated and changed together.

Mr. Walker stated that each agency needs to define its mission clearly and continuously. Core agency responsibilities will probably not change and are inherently governmental. These core responsibilities need to be defined in terms of skills and competencies needed to achieve them.

Mr. Cipolla agreed that workforce planning is on-going and a process should be institutionalized that constantly updates the skills and competencies as they relate to the agency's mission and changes in that mission. He acknowledged that each agency has a strategic plan that is regularly updated; the same kind of process should be in place for workforce planning that links with mission planning.

*Question:* Ms. Bowers asked whether the changes made in the RIF criteria and salaries for information technology and scientific personnel are legislative reforms or changes made within the agencies?

*Response:* Mr. Walker stated that these changes required legislation and only applied to the GAO. He thought that 90% of the changes that agencies could make would not require legislation. Ms. Payne added that OPM recently announced new pay scales for information technology positions across all agencies.

***Public Comment***

The Council received a letter from Mr. Ed Warshauer (Houston, TX) regarding creosote pollution. The Council agreed that this issue is beyond its scope and expertise. The members recommended forwarding the letter to EPA's Office of Prevention, Pesticides, and Toxic Substances (OPPTS) for an appropriate response. The letter was sent to OPPTS on November 27, 2000.

***Breakout Sessions***

The three workgroups met for the remainder of this afternoon and morning of the second day. The report-outs were presented during the plenary session on Thursday afternoon. Summaries of the breakout sessions are in Attachment B.

***Thursday, November 9, 2000***

***Attendees:***

**Council and Consultants:** Same as on November 8, 2000

**EPA Representatives:** Ms. Sonia Altieri, Mr. Jay Benforado, Mr. Brion Cook, Ms. Anita Hanson, Mr. Dave O'Connor (OARM), Ms. Margaret Schneider (OEI), Mr. David Ziegele, and Ms. Gwen Whitt

During the afternoon session, the three workgroup leaders reported on the results of their activities during the breakout sessions; representatives of several NACEPT subcommittees reported on the status of their work; an update on the accomplishments associated with the NACEPT Self-study was also presented.

***Results of the Breakout Sessions***

***Workgroup on Identification of Emerging Issues and Trends Facing EPA:***

Ms. Hixon reported that an historical perspective on EPA's strategic planning process was provided by Mr. Alex Wolfe and Mr. Michael Brody gave a presentation on EPA's Alternative Environmental Futures Group Forum.

Mr. Steven Kenney, Toffler Associates gave a presentation on how society and the workforce would be changing in the near future. Key points from his presentation follow:

- C The Nation is transforming from a mass society into one shaped by shifting coalitions of interest.
- C Customers and individuals will hold more power in business.
- C Fundamental elements, such as, education, family, and agencies are changing at different rates.
- C The core nature and character of employees will change-- competencies range from narrow, to issue-oriented, to multiple abilities.
- C Human talent will be the major focus in the future.
- C Levering competencies outside EPA will be a key part of emergent issues.

The Workgroup agreed to prepare white papers on each emerging issue. Its interim report would be sent to the Council for review and comment before it is issued to the Agency's transition team. Ms. Hixon outlined several issues to be included in the report: information, and environmental protection processes, human capital would be mentioned in the introduction as a driving force behind the issues. The following major topics and issues were presented:

- C Holistic approaches including eco-systems management, coordinated rule-making process, and integrated knowledge of regions.
- C Beyond command and control approaches with non-point sources of pollution by encouraging better performance measures and instruments.
- C Communications issues, including population diversity; emerging communication technology; narrowing the gap between knowledgeable people and those with less knowledge; changing rhetoric away from command and control to alternative dispute resolution; and compliance reporting.
- C Substantive trends and themes include CERCLA and sunset, and environmental issues such as

Appalachian Clean Streams Initiative, product take-back, science, global warming, geo-spatial information technology, and technology acceptance and adoption.

C

Mr. Greenwood asked whether the Council would be presenting priority issues to EPA or just a listing. Some of the issues are appropriate for EPA, but others are under the purview of other agencies or local governments. Ms. Hixon responded that at some point the list will be prioritized.

Mr. Jones stated that the Workgroup decided to submit comments and recommendations on the present EPA strategic planning process as well as the new list of issues. Dr. Henderson noted that the issues could be presented to the new Administration for action; however, trends are on-going beyond the four-year election process. Mr. Rhodes suggested that the first phase should probably include a listing of the issues. He proposed that any discussion of the strategic planning process be forwarded to the Integration Workgroup and finalized by the Council so that the product is consistent. Council members agreed with these suggestions.

***Workgroup on Evaluation of EPA's Workforce Capacity Efforts:*** Ms. Bowers stated that this Workgroup focused on the questions in its charge. The members concluded that the issue of human capital and human resource planning is very relevant to the work of the other workgroups. The Integration Workgroup has identified the need for human resource planning to be part of the strategic planning for the agency.

Another important issue is that EPA's strategic plan does not fit the definition of a strategic plan in the private sector or other governmental agencies. The Workgroup felt strongly that EPA needs to better define its mission. The Council could provide EPA with proposals on how to develop a strategic plan.

The Workgroup reached the following conclusions:

- C EPA's human resources staff should develop a plan that matches the overall strategic plan. The HR plan should deal with difficult questions, such as: "What employees are needed? What do they need to be? Are they going to be EPA employees or contractors? Will they be permanent or temporary employees?"
- C The human resources plan has to cover more than just how EPA attracts and retains good employees. The HR plan depends on what EPA will look like in the future.

Ms. Bowers said that another major issue is related to integration of EPA's planning processes. The Workgroup felt that integration would not happen unless a representative of OARM is involved in the overall strategic planning process and there is accountability for human resources commitments by the entire organization.

Ms. Bowers suggested that after the new Administration is in place, the three workgroups should meet and develop recommendations that incorporate emerging issues, integration, and human resources.

Next Steps: This Workgroup will continue to address the questions in its charge. This will be accomplished on-line and through teleconferences.

***Workgroup on the Integration of EPA's Key Planning Processes:*** Dr. John Ehrmann presented the process used by this Workgroup, highlights of the dialog with EPA senior managers, and suggestions and recommendations (short and long term) for EPA. He noted that the Workgroup spent a lot of time discussing criteria, elements and characteristics of processes that have been used in other organizations to successfully integrate elements of the planning process.

To assist the Workgroup with this task:

- C Ms. Bowers discussed how Merck accomplished integrating human resources and information planning into its strategic planning process.
- C EPA's current activities and perspectives on planning and integration were presented by Ms. Margaret Schneider (OEI), Mr. David O'Conner (OARM), and Mr. David Ziegele (OCFO).

The Workgroup first discussed the meaning of "integration," and drafted a definition as follows:

Integration is the alignment and linkage of goal development, time cycles, and budget planning between the overall strategic planning information management and the human resource functions. Integration is accomplished through informed communication and in an iterative manner.

Dr. Ehrmann stated that the Workgroup strongly supports the need for linkage and integration between the human resource planning and information functions with the overall strategic plan. Human resource planning should be helping the agency to accomplish its strategic goals.

The Workgroup also discussed the following issues:

- C Different planning tasks related to three different time dimensions: Long term - 10 to 20 years; midterm - 3 to 10 years; and short term - 1 to 3 years. The planning processes should address all of these time dimensions. Different processes relate to different time dimensions. For example, information needs and human resources planning cover a long time span.

Several key principles that need to be part of the integration process. The process needs to:

- C Provide a clear benefit to the whole organization and to the individual units;
- C Be understandable and clear and simple enough to implement;
- C Build upon the strengths of the existing planning process; and
- C Be planned in an intentional manner with no surprises.

Elements of an effective integrated process:

- C Clear leadership to drive decision-making
- C Commonly understood language so that organizational units can communicate with each other
- C Periodic evaluation and fine tuning
- C Flexibility to adapt to emerging situations

Include implementation realities, such as:



- C On-going feedback mechanisms, a meaningful reward system;
- C Agency support for the implementation process, and
- C Adequate financial and human resources allocated to support the planning process.

Next Steps: The Workgroup has a strong interest in developing a letter to the Transition team to communicate several short- term recommendations as follows:

- C A vision of the future should incorporate electronic information and human resources planning into the agency's planning processes, because there are going to be more holistic cross-media approaches in the future.
- C A description of the NACEPT process in the three planning areas, indicating that progress has been made and encouraging the new Administration to build on that progress.
- C A provision of ideas about how to begin the process of linkage in terms of information and human resource needs of the programs and for the overall vision.
- C An offer to the new Administration of NACEPT's willingness to continue to provide advice, both short- and long-term.

Dr. Ehrmann emphasized that any communication to the transition team must come from the full NACEPT Council. The work of each workgroup should be integrated into one piece of correspondence. The Workgroup also proposed initiating this correspondence in the short term. The next steps could include waiting for a charge from the new Administration or brainstorming ideas that the Council might like to provide advice on in the near future.

Mr. Rhodes agreed that any short term product should be an integration of the three workgroups' recommendations. This would make it easier for the Council to review and comment on the recommendations. He suggested sending the workgroups' reports to Dr. Ehrmann and Ms. Stinson to prepare an integrated preliminary report.

Mr. Benforado suggested that three to four weeks would be an adequate timeframe. There are two transition periods: transition team members will be at the Agency to prepare a report for the new Administration. That is a three-month time period that begins with the election of the President and the inauguration. It would be important to have a preliminary report from the Council in that time frame.

The second transition period begins with the appointment of new leadership for EPA. At that point, they will be developing the new Administration's priorities for the Agency. This is a second opportunity for the Council to have an impact. There will be more time to develop the second set of recommendations. The Council should maintain its independence from the transition team, because the Council's real audience is the new EPA Administrator. He further explained that the new Administration is not presenting a budget to Congress until late Spring or Summer. Input into the budget would be helpful in March or April.

Mr. Greenwood stated that since the Council and workgroups exist at the pleasure of the Administrator it would be important to complete a product within a month or so.

Ms. Wilma Subra stated that the emerging issues and trends list was complete and asked about the level of detail needed for the letter. Dr. Ehrman suggested that the workgroup's descriptions could be attached to the letter, if they are completed in time; however, the letter should be drafted immediately.

Dr. Sullivan and Ms. Wood cautioned the Council about putting too many specific issues into the letter. The emphasis should be placed on the existence of NACEPT and its focus on human resources and information planning and the Council's willingness to work on issues in the future.

The Council decided to prepare a letter presenting preliminary findings to Administrator Browner, and with a focus on the importance of integrating the key planning processes. The goal would be to have the final version of the draft completed by the first week of December. This deadline was agreeable to EPA staff and members of the Council. Mr. Rhodes suggested that the Council consider a long-term goal and specific recommendations about human resources, integration, and communication.

### ***NACEPT Subcommittee Updates on Key Actions***

#### Compliance Assistance Subcommittee

Mr. Sustich noted that copies of the Subcommittee's report were reviewed and approved by the Council and submitted to the Agency. The Subcommittee's charge is to assist EPA with the design and implementation of several projects, as follows:

- C Development of a clearinghouse for compliance assistance materials developed by federal and state governments and the private sector. The Clearinghouse has been designed and is accessible to all consensus providers across the country.
- C Comment on the Agency-wide compliance assistance activity plan which was developed through OECA for the year 2001. The NACEPT Council submitted comments which included directions on future plans to the Agency.
- C Assist the Agency in inventing a national forum for compliance assistance providers to enable EPA to receive input on the plan and other critical issues from providers.
- C The Subcommittee met in November, January, and May, 2000 and also worked on the compliance assistance forum held in Atlanta, Georgia, in March 2000.
- C A commitment has been made to focus on three key areas of compliance assistance: (1) developing and delivering compliance assistance tools; (2) measuring the success of the Agency's compliance assistance efforts, and (3) incorporating compliance assistance in the Agency's Mission.

Developing Compliance Assistance Tools: Mr. Sustich stated that the demand for new compliance assistance tools arises from implementation of existing rules, innovative technologies, new legislation, consumers concerns, etc. The Subcommittee will continue to work on the following questions:

- C What criteria can compliance assistance providers use to prioritize the type of tools to be

developed and for whom?

- C What criteria can assistance providers use to identify the sectors or areas that are in need of compliance assistance?
- C What factors will determine who should be the primary agency or organization to deliver the tool?
- C What efforts can be made to avoid duplication?
- C How can the Agency be informed of what tools other providers are developing?
- C How can the necessary partnerships in the development of tools to reduce the use of resources be identified?

Measuring the Success of the Agency's Compliance Assistance Efforts: The public and lawmakers are beginning to ask about the effect of compliance assistance on environmental and human health. The key questions to be investigated in this area include the following:

- C What are the performance measurements in relation to compliance assistance?
- C How should compliance assistance performers be measured qualitatively?
- C What types of improvement should be measured--behavioral change, environmental improvement, technology adoption rates?
- C What type of tracking is needed to measure it effectively?
- C Who should be doing the measuring--the Agency or providers?
- C How does the Agency get providers who are developing and delivering compliance assistance to participate in the measurement process?
- C What incentives can be provided to encourage measurement of compliance assistance?
- C What communication vehicles can be developed to share findings and successes?

Incorporating Compliance Assistance into the Agency's Mission: Compliance assistance is part of a special tool that the Agency uses to ensure that the regulated community complies with environmental regulations. Other tools within the spectrum include enforcement, compliance monitoring, incentive programs, technical assistance, and pollution prevention. Traditionally, the use of these tools has been very segmented. When a new rule is finalized, the Agency focuses on helping the regulated community understand the new regulations through awareness building, technical information, and interpretive guidance. Once the rule has been in effect, the next step is compliance monitoring, and then enforcement.

The Subcommittee wants to ensure that compliance assistance is viewed as an integral part of the Agency's core mission through all phases of the implementation of regulations. It will attempt to answer the following questions:

- C What must the Agency do to foster an integrative view of compliance assistance among its co-regulated partners in states and localities?
- C What guidance can be developed by the Agency to identify who and when a compliance assistance tool should be integrated with the other enforcement tools?
- C How can these efforts improve environmental performance?

Subcommittee workgroups are addressing each of these areas. Draft products should be available by late December 2000. The Subcommittee will meet in January 2001 to review the drafts.

The revised draft products should be available in March 2001 in time for the next compliance assistance forum in April 2001. The draft reports will be reviewed by the compliance assistance community in April and the final products and recommendations will be available to the Council by June 2001.

Standing Committee on Sectors - Co-Chairs Mr. David Marsh and Ms. Wilma Subra

Mr. Marsh reported said that the subcommittee has completed the revision and review of EPA's one-year sector action plan. The last six months have been spent on the Agency's five-year plan. This plan was submitted to the Council six weeks ago for review. With the approval of the Council, the plan will be submitted to the EPA Administrator. The draft plan was sent to the RAC for review and comments. The subcommittee would like to meet in the early Spring and make necessary revisions.

*NACEPT Self-Study: Accomplishments* - Ms. Gwen Whitt

The purpose of this presentation was to focus on the accomplishments of Office of Cooperative Environmental Management (OCEM) in addressing the recommendations in the 1999 NACEPT Self-Study and to discuss the lessons learned. Ms. Whitt provided a brief overview of the Self-Study, as follows:

NACEPT was created in 1988 and since that time has engaged in a number of issues. It has produced over 50 reports with 1000 recommendations. During that time the OCEM has worked to demonstrate the effectiveness of NACEPT's advice on the Agency's decision-making processes and policies.

In 1998, a decision was made to document the contributions of NACEPT. The questions addressed were:

- C Does the NACEPT add value to EPA as a policy-making process?
- C What has been the impact of NACEPT's advice and recommendations over the years?
- C How can NACEPT improve its effectiveness?

The findings revealed that many actions have resulted from the recommendations:

- C The Agency has created a chief information officer.
- C The Office of Research and Development and its management strategy for scientific data has been positively influenced.
- C The Office of Environmental Education was created.
- C Significant contributions to the Superfund re-authorization were made.

The self-assessment was conducted to determine the impacts of NACEPT, to see how NACEPT can be improved and become even more effective in terms of providing advice and recommendations.

A self-study team was assembled of past and present NACEPT members. The study involved an extensive review of data, documents, and reports that subcommittees had developed. A survey of all current and past NACEPT members was completed with one-on-one interviews of a sample of these members and EPA officials.

The study revealed that NACEPT does provide valuable input and advice to EPA.

- C NACEPT's advice and recommendations were characterized by being timely for the Agency's

- decision-making;
- C Was consistent with the charges from the Agency;
- C Represented balanced points of view;
- C Provided adequate guidance to its subcommittees in terms of their charges.
- C Discovered that NACEPT operated mainly through subcommittees in well-planned and structured meetings.

Recommended Opportunities for NACEPT and OCEM to improve:

- C Document or track the agency's feedback on the impact of NACEPT's advice and recommendations.
- C Enhance the ability to help the Council and subcommittees arrive at early agreement on purpose and goals of the separate units and clearly explain the Agency's charge to the Council and the subcommittees.
- C Communication between the Council members and its subcommittees
- C Engage in strategic planning
- C Publicize NACEPT's work better internally and externally
- C Maintain contact with current and former NACEPT members
- C Evaluate the Council and subcommittee's activities on a regular basis.

Accomplishments to date include:

- C Enhancing the role of NACEPT in operating as a pro-active and visionary body
- C Establishing the Workgroup on Emerging Issues and Trends
- C Increased the awareness of NACEPT's activities by developing Internet links between the NACEPT subcommittees
- C Entering into partnerships with the General Services Administration (GSA) by developing NACEPT's reports through GSA.
- C Enhancing internal communications through partnerships with EPA program offices.
- C Enhancing communication between the Council, subcommittees, and EPA program officers through the development of Agency charges.
- C Encouraging program officer partners to meet with subcommittees to develop specific charges and clarify issues.
- C Entering into memoranda of agreement with program office partners to clearly identify the roles of a particular program office, OCEM, the NACEPT DFO, and the subcommittee DFO.
- C Sonia Altieri is the DFO liaison for the NACEPT subcommittees. One of her responsibilities is to monitor and report on the disposition of the subcommittees' recommendations. She provides policy guidance, helps to resolve issues, and brings major issues back to OCEM management.
- C OCEM has engaged in training of its Designated Federal Officers.
- C Holds monthly meetings to discuss issues;
- C Guest speakers are invited to give presentations on FACA-related committee work and other issues.
- C The advisory committee manual is being revised.
- C An orientation package was developed for new NACEPT members, which includes an overview of EPA's mission and its function. The packet also includes a brief introduction to EPA's 23 Federal advisory committees.

OCEM is continuing to address the self-study recommendations as part of its goal of continuous improvement. The self-study has confirmed the value of NACEPT's recommendations to the EPA. The self-study also provides a model that can be used by other FACA committees to measure their success and identify opportunities for improvement.

### **Next Steps**

The next Council meeting will be planned for late February/March at a location in the Washington, DC metropolitan area. The Council adjourned at 1:30 pm.

**ATTACHMENT A**

**Meeting Agenda**

**U.S. Environmental Protection Agency  
National Advisory Council for  
Environmental Policy and Technology Meeting  
November 8 - 9, 2000**

**Radisson Hotel Old Town Alexandria  
901 North Fairfax Street  
Alexandria, VA 22314  
Phone: 703-683-6000  
*Madison Room***

**Wednesday, November 8, 2000**

- 8:30 am** Registration
- 9:00** Welcome and Overview of Agenda
- C Robert L. Rhodes, Jr., Chair/NACEPT
- Requirements of Federal Advisory Committees
- C Hale Hawbecker, EPA/Office of The General Counsel
- 10:15** **BREAK**
- 10:30** **Plenary Session**
- Human Resources Management in the Public Sector - Panel Discussion**
- C David Walker, Comptroller General, GAO
  - C Frank Cipolla, Director, Center for Human Resources, National Academy of Public Administration
  - C Sandra Payne, Strategic Initiatives Coordinator, Office of the Director, OPM
- Questions and Answers**
- 12:00** **LUNCH**
- 1:30** **Public Comments**
- 2:00** **Activities of NACEPT Workgroups - Update**
- Emerging Trends Workgroup
  - Evaluation of EPA's Workforce Capacity Efforts Workgroup
  - Integration of EPA's Key Planning Process Workgroup
- 3:00** **Breakout Sessions**
- C **Approaches for Integrating EPA's Key Planning Processes**  
        **Location: Capital View Club - 12<sup>th</sup> Floor**  
        *Objective: To engage in a facilitated dialog with the NACEPT to discuss the definition of integration; and how it is implemented in large organizations.*  
  
        Key Questions for consideration by the Workgroup:
    - S What is the definition of integration?
    - S How it is accomplished in large organizations?
    - S What is the ideal paradigm for integrating planning processes?
  - C **Evaluation of EPA's Workforce Capacity Efforts**



**Location: Lincoln Board Room - 2<sup>nd</sup> Floor**

*Objective: To provide an assessment EPA's workforce planning efforts and identify the feasibility of implementation.*

*Objective: To identify a role for NACEPT in support of the Agency's transition*

**C Identification of Emerging Issues and Trends Facing EPA**

**Location: Madison Room - 2<sup>nd</sup> Floor**

*Objective: To compare the workgroup's ideas with EPA perspective's on identifying emerging trends and issues.*

- S Overview of workgroup agenda
- S Historical perspective of the EPA's strategic planning process
- S Alternative Environmental Futures Group
- S Presentation and dialogue with a "futurist"

Steven Kenney, Toffler Associates

*Objective: To compare the workgroup's ideas with an outside perspective to identify and prioritize significant issues and trends for the EPA during the next 5-10 years.*

- S Review and incorporate changes to the interim report of emerging issues and trends to help the EPA prepare for the transition.

*Objective: To introduce the workgroup's efforts concerning its interim report.*

**5:00**

**ADJOURN**

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**Thursday November 9, 2000**

**8:30 am**

**Breakout Sessions**

**C Approaches for Integrating EPA's Key Planning Processes**

**Location: Capital View Club - 12<sup>th</sup> Floor**

*Objective: To engage in a dialog with the Senior Leadership of OEI, OCFO and OARM to establish a baseline for integration of the planning processes.*

Managers of the three program offices will provide brief presentations as background on the status of their planning efforts

Key Questions for each program office manager to address:

- S What is your office doing to integrate your planning processes with the other key players?
- S What are your future plans for improving the integration process? What

is on the drawing board?

S What are the barriers/opportunities to integration?

S How can the integration process help your planning efforts?

**C Evaluation of EPA's Workforce Capacity Efforts**

**Location: Lincoln Board Room - 2<sup>nd</sup> Floor**

**C Identification of Emerging Issues and Trends Facing EPA**

**Location: Madison Room**

10:00 **BREAK**

10:15 **C Approaches for Integrating EPA's Key Planning Processes**

**Location: Capital View Club - 12<sup>th</sup> Floor**

*Objective: Discussion of EPA's baseline, identification of next steps and workplan development*

Presentation: The Integration Process within Merck & Company, Inc.  
Ms. Dorothy Bowers

Key Questions:

S What are the potential solutions for bridging the gap between the integration paradigm and EPA's Baseline?

S What information or additional analysis is needed?

S What are the key action items for future NACEPT meetings

12:00 **LUNCH**

1:30 **Reconvene in Plenary - Madison Room**

**Perspectives of the New Administration**

C Beth Viola, Holland & Knight, LLP (*Invited*) or

C Rich Innes, Conservation Strategies (*Invited*)

**General Discussion on Interim Recommendations Concerning:**

C Approaches for Integrating EPA's Key Planning Processes

C Evaluation of EPA's Workforce Capacity Efforts

C Identification of Emerging Issues and Trends Facing EPA

**Other NACEPT Business**

C NACEPT Subcommittees' Updates on Key Actions

S Compliance Assistance Committee - Richard Sustich, coChair

S Standing Committee on Sectors - David Marsh/Wilma Subra, coChairs

C Accomplishments Resulting from the 1999 NACEPT Self-Study

**Wrap-Up/Next Steps**

4:00 **ADJOURN**

## **ATTACHMENT B**

### **Summaries of the Breakout Sessions**

***U.S. Environmental Protection Agency  
National Advisory Council for Environmental Policy and Technology (NACEPT)***

***Evaluation of EPAs Workforce Capacity Efforts Workgroup***

***Meeting Summary***

Radisson Hotel  
901 North Fairfax Street  
Old Town, Alexandria, VA  
Lincoln Board Room

**Wednesday, November 8, 2000**

**Attendees:**

***NACEPT Council***

D. Randall Brandt  
Dorothy P. Bowers  
Kirby A. Dyess  
Bernard D. Rostker  
Carroll A. Rushford

***EPA:***

Anita Hanson  
Kirk Maconaughey  
Kerry Weiss

**Overview**

The first breakout session of the *Workforce Capacity Efforts Workgroup* explored the issues regarding recruitment and retention of EPA personnel. The EPA employees 18,000 people. About 55 percent of these employees will be eligible for retirement in four years. The goal of the session was to help identify the competencies and skills of a successful EPA employee. The charge of session participants was to look at successful for-profit industry models of hiring standards and practices as a means of developing a future model for EPA staffing. Issues explored include: decentralization versus centralization of hiring and evaluating human resources (employees), skills training and development, tenure rules, work culture, organizational mission, senior management interface and “buy-in,” outsourcing, ad hoc employees, and resources, including funding, for recruitment and retention.

**Summary of Deliberation**

*Question:* Why does EPA use other federal agencies as their servicing office for HR.

*Response:* The reason, at least regarding the Office of Inspector General (IG), is that EPA is seeking commitments in terms of quality and time that it is not receiving in-house.

*Question:* Does EPA have a feedback mechanism in place to determine constituents' levels of trust and satisfaction with the Agency.

*Response:* The Inspector General (IG) conducts a satisfaction survey with its clients. In addition, organizational development counseling and processing of training forms takes place within the organization. EPA is very decentralized, with each regional office having its own HR Office. Likewise, research and development, usually in laboratories, report through laboratory HR offices, and not as a reporting structure through the Office of Human Resources. On a national level, there is a training policy, organization development, human resource development, and policy and "roll-out" strategy. EPA, on a national level, is trying to define what competencies and skills an employee needs to help the agency meet its mission.

The Human Capital Plan, with a draft action plan for 2001, calls for developing an agency workforce planning system. The Human Resource Council endorsed the plan and recommended funding and resources for its implementation. Plan items include clarification of what the agency's future recruitment and retention strategies will be.

*Question:* How can EPA retain the knowledge of its retiring workforce? The answer is that a major culture change has to occur. It is possible through a difficult process called "total quality management" or "quality reinvention." Organizations whose employees undergo such training speak of customers, delivering value, and teamwork.

*Question:* How are EPA's HR efforts compare with benchmark operations of the private sector.

*Response:* At Merck, the manufacturing strategic plan (not Merck's global strategic plan, which includes research and development) realizes that human capital is part of an organization's resources. Therefore, a Human Resources strategic plan was developed. The success of Merck's HR strategic plan was knowledge of the organization's mission and aligning it with the organization's business strategy. Then, employees were realigned to make the strategic plan work.

The organization must ask, "What will make the organization successful in future years?" This is more important than asking, "What has made it successful in the past?" Merck found the HR strategic plan needs to be developed by the same individuals who develop the business plan, so that the two plans work together. Merck senior management realized how vital the HR plan was to organization's success, became involved and provided necessary resources.

The EPA has two distinct human resource processes – organizational manpower and "A-76" – services or needs that may be contracted out of the agency. Through A-76, the EPA has been able to reduce manpower numbers, but this is often stressful and challenging.

College students, graduate students and workers who return to school through continuing education or leave to take sabbaticals are all potential human resources. EPA does a good job in allowing employees to take sabbaticals to return to school for higher education. Mr. Maconaughey stated that leave of absences are shorter and more focused on specific training.

Ms. Rushford asked if the group would like to identify five industries with benchmark HR practices and

then the group will make site visits. Dr. Brandt suggested that before the group identifies industries and makes site visits, further prioritization of questions to be answered, based on critical success factors of human resource management, must take place.

The lesson from this anecdote is that the retention solution was not in monetary compensation. It was found in a creative solution that met employee “passions.” Likewise, employees often chose to work at the EPA because they want to help the environment and or like government service. Therefore, the HR solution may be in such creative solutions, and in exploring industries that have successfully used such solutions.

Based upon the prior discussion, Mr. Weiss asked whether EPA needs to remove institutional barriers from its “succession plan?” He noted that barriers, such as the competitive process for people to move into positions, might not be present in private industry. Ms. Dyess noted that in industry, a well-run organization uses “open merit.”

Dr. Rostker commented that EPA’s institutional chart reflects a flat organization, with the most direct reports to the Administrator. This issue, along with consideration of outsourced work, must be considered in the inquiry process.

Ms. Dyess described the succession rotational engineering programs at Intel:

*Engineers with master’s degrees and perhaps some experience rotate through the organization. They are “owned” by HR, not a specific department. After their rotations, they move into mid-level management positions. The program is funded through a program office, not the central office. There is a similar program for college graduates. Participants are assigned mentors and one’s peers, customers and subordinates complete their evaluations. The review impacts merit raises and promotions. Intel is not unionized.*

EPA also has a rotation program for new college graduates. The interns rotate for two years and are then absorbed by home offices. Unlike Intel, the program is managed and funded by a central office and fund.

The discussion changed to focus on core competencies and outsourcing of lab personnel. Dr. Brandt noted that some personnel are in-house and others are outsourced. Dr. Rostker said he was not recommending whether or not to contract out lab personnel – rather, he was suggesting different ways the EPA could be organized or restructuring.

Ms. Rushford noted future HR concerns, as identified in EPA’s Workforce Assessment Project report are: Gaps” in current employee communication and people skills; and difficulty attracting people to EPA jobs because private industry is more competitive.

Dr. Brandt suggested that people with appropriate skills can be brought in ad hoc for as long as needed. The traditional way of accomplishing an agency’s mission was to hire all the people needed to do the mission. Another way is to look at competencies and who can best do them – in-house or outsourced, with a good internal monitoring program. Ms. Bowers added that HR could not answer these questions; they stem from the organization’s mission and strategic goals and need to be thought about at a “high

enough level.”

The following question was raised:

“How to get people with the critical skills and competencies to want to do the work that is necessary to accomplish the mission of the EPA, versus how to get these same people to want to take the job (fulltime and/or contracted workers)? Mr. Weiss noted that this is a change in thinking from “how do EPA equip its people to get the work done?”

Dr. Rostker noted that turnover might not be a bad thing. Retention is only needed to get the job done. The problem is that in federal government, an employee cannot be forced to move and there is an absolute standard of performance.

Regarding the HR Human Capital Plan and the Annual Plan that evolved from the Capital Plan, Dr. Rostker stated that he has not seen data concerning how to equip EPA employees or how to use resources to get the job done. Mr. Weiss stated that typically there is not a budget; a proposal is made for a product and then they “sell the product.”

**Ms. Dyess** responded that an employee course in communication skills may need to be developed. Course participants and locations need to be determined. At Intel, supervisors identify employees for training or “reskills” courses. These employees already have minimal skills for the course and are ready for training. Employees are not “pushed” to take the course. They want to take it, because they feel they need it. And the courses are full. The courses are tied to objectives and have performance measurements. Feedback comes with improved job performance.

At Intel, career-broadening experiences are handled through a technical assistant (TA) with expertise other than the senior manager’s expertise. The manager is assigned one or two TAs, who is two or three career ladders under the senior manager level. They “trail” along with the senior manager, adding their expertise to the senior manager’s as needed, while broadening their own skills. The TAs eventually are employed in senior management positions. Dr. Brandt noted that a person similar to a TA could be a full time person or come from outside the organization, therefore “managing connectivity.” Dr. Rostker added that EPA GS 13 employees could work with political people and learn the integration function.

Ms. Rushford commented that perhaps HR employees of the EPA feel they are just “staff people” and not important in the organization. They feel they are the paper pushers who get the staffing done. Moreover, line managers may not see HR as a helpful resource in job performance or with staffing projections. These observations highlight that HR must be connected to senior management and the organization’s strategic plan. HR people need to be at the planning table where programmatic decisions are being made.

Ms. Dyess suggested looking at organizational culture as a way of analyzing what is driving the system. At Intel, about eight years ago when changes were needed to diversify the company, the following questions were asked:

*What are the systems that we are reinforcing that we have today, the culture that we have today, and the fact that anything that’s new in a new business arena gets killed fairly*

*quickly.*

*What is it that makes that happen?*

*What does it have to look like to keep from happening in the future?*

*What are you going to do as far as changing the company?*

*How do you go about doing it?*

Regarding negativity toward the HR function, Ms. Rushford noted that many employees blame the system, which is created by people. Therefore, management needs to work with HR to overcome the problems relating to employees' views of HR as a barrier to getting their jobs accomplished. Moreover, the "snobbery" issues, perceived by title, salary, flexi-time, and parking space assignment, need to be addressed. Otherwise, some employees do not feel that they are important, honored and valued.

Dr. Rostker asked if there were useful documents from other organizations to share with the workgroup. Ms. Bowers offered to ask for approval to distribute Intel's employee feedback survey and Intel's program guide in leadership and skills development. Dr. Rostker said if dissemination is a problem, a group discussion of the documents' contents, including the thought processes to achieve the end product, would be beneficial.

The workgroup was asked to consider visiting industries with HR practices that would provide benchmarks for the EPA. Ms. Dyess stated that private industry is not that different from the public sector – and the problems and issues are similar.

\*\*\*\*\*

***Thursday, November 9, 2000***

**Committee Members Attending:**

D. Randall Brandt  
Dorothy P. Bowers  
Kirby A. Dyess  
Bernard D. Rostker  
Carroll A. Rushford

**EPA Members Attending:**

Anita Hanson  
Kirk Maconaughey  
Kerry Weiss

**Overview**

This session continued with a discussion of the questions from the prior day. The Workgroup also



analyzed the Agency's six strategic HR goals. Each HR goal was reviewed in terms of the Agency's mission, and changes and additions were suggested. The group determined that hard data is needed to evaluate how the HR function is meeting its stated goals. Methods of measurement, including surveys, questionnaires and data collection through employee tests, were discussed and may be utilized in the future.

### **Summary of Deliberation**

Ms. Bowers provided input from the NACEPT Integration Workgroup. She commented that the Workgroup is struggling with the same issues as the Workforce Capacity Workgroup in trying to identify what issues will be most helpful to the EPA. There is agreement that the EPA strategic planning process has not been integrated with anything else from human resources. Therefore, the Integration Workgroup is going to recommend a stronger working relationship at the EPA level. The Emerging Issues and Trends Workgroup may be reaching the same conclusion.

Ms. Rushford presented three flow charts. The first chart reflected the five items in the charge and responses to specific questions. The chart presented a comparison between what the Workgroup has read about EPA's programs versus what the Workgroup knows. The second chart identified suggestions and concerns. The third chart contained side issues. One of the charts also contained current industry tools. The workgroup agreed unanimously with this format for the session. Ms. Bowers lead the discussion and Ms. Rushford was the facilitator.

Question 1: How do the Agency's human resource efforts compare to those considered to be benchmarks in the private sector?

Ms. Dyess stated that the Workforce Assessment provides a good analysis of where the EPA is today and some points to current issues. However, the strategic document is too general and intangible, and does not provide measures to determine progress, which is important in the HR field.

Dr. Brandt added that the last few pages of the document note that measures are to be developed. The only way to develop them is by opinion polling. That would not provide "hard measures," which could make some EPA personnel uncomfortable.

Dr. Rostker noted that without numbers, the document was not very useful because it did not contain the background that brought the ideas to conclusion. The "profile" of the appropriate EPA employee is unclear, as are the skills needed for the job. Information is needed about age, experience distribution, and skills inventories. He defined "succession plan" as follows:

Who is going to replace me when I leave? (narrow definition)

How do I move people in the organization? (broad definition)

What do I want out of the supervisor?

How many years of experience in a range?

What kind of skills?

He noted that such answers would provide “disciplined thinking,” and that the document is not disciplined.

Ms. Dyess said what she sees as missing is first asking: What is our business? What are we supposed to be doing? How is that going to change with the future? How does operational change effect the workforce?

To help answer these questions, she suggested scenario planning, which is common in business. Three possible scenarios include:

The EPA “stays away this.”

EPA shrinks markedly.

EPAs future is in the direction of providing technical, scientific information resources.

Mr. Weiss noted that scenarios were developed at the EPA, but they were focused on what society would look like.

Ms. Dyess described another tool used by Intel – a data gathering exercise when managers took little exams over a 10- year period. From this data, successful individuals in the organization were identified. One critical indicator was educational level.

At the Department of Defense, longitudinal studies of an individual can be developed. Longitudinal survey files may soon be developed. Individual social security numbers will be scrambled to insure privacy. Such surveys will demonstrate what happens professionally after an individual gets a raise or promotion.

Ms. Rushford stated that data relying on self-reporting by individuals may not be reliable. Moreover, if you ask questions, you must be prepared to answer employee responses to them. Dr. Brandt said the questioner must be prepared to respond to questions raised by questionnaires, because an expectation is created. For example, at Hewlett Packard, surveys identified issues of customers. The issues were addressed and within weeks of the data analysis, customers received answers to their concerns – plus a videotape of a new product that addressed the concerns. The survey, a learning device, was utilized as a marketing tool.

Ms. Dyess noted that surveying is:

- Immediate feedback;
- Respond to the results that you get; and
- Responses must come from a very high level.

Ms. Rushford summarized the “teaching point” of the group’s discussion regarding surveying as indicating that the EPA needs a mechanism to track employee activity. EPA should consider methods to evaluate the effectiveness of tools such as flexi-tour, flexi-time, flexible work place, and alternate workstations. Another issue to consider is that if the system is treated in one way, how does that effect people down the

line? For example, if training is cut back, what is the long-range effect?

The workgroup examined the six strategic goals for HR. Dr. Rostker asked if any major goals were missing and whether the goals relate to the action plan, or are the goals on target?

The goals are :

1. Attract, retain and motivate.
2. Integrate all elements of human resources.
3. Quality of life and respect to the employee in a harassment-free environment.
4. Support and provide education, training and development.
5. Teamwork and collaborative routine practices with internal and external partners.
6. Effective management of the other goals.

All the goals support the EPA's mission. The operational problem may be that various "sub-organizations" integrate the goals differently, despite the workings of Program Integration, an organization whose charge is to combine the budget, work of health affairs, reserve affairs, and military policy, and combine them into a single document.

In evaluating the goals, Ms. Rushford suggested less bureaucratic and theoretical goals. Dr. Brandt added that in Goal 1, the word "retain" might not make sense in the current work environment. More appropriate wording may be, "*effectively managed relationships with a diverse and highly skilled work force.*"

Ms. Bowers asked if a measurement should be incorporated into Goal 3. Goals 4 and 5 appear to be the same .

Noting that communication and "bad management" were problems identified in the Workforce Assessment, Ms. Rushford asked if the term "effective communication" should be added to Goal 5.

Ms. Dyess asked if "accountability," such as accountability by managers in managing employees, should be addressed as a HR goal.

Dr. Brandt said a general approach to get from goals to a strategic measurement system requires asking two questions:

If you were achieving these goals, what types of things would it involve?

If employees and managers were saying and doing these things, what outcomes or results would be produced?

For example, if a measurement component were added to Goal 3, employees may be encouraged to make suggestions and recommendations for new and existing programs. The answers would be tracked and indicators would result. The value of these indicators is that they serve as an early warning mechanism and the organization is forewarned of bad news.

Ms. Rushford cited the book Creative Visualization, which suggests visualizing how something, such as an organization, would look – what behaviors would be seen. The goals should identify:

- C What behaviors are seen?
- C Are individuals treating each other with trust and respect at all times? (Is that part of the mission?)
- C Do managers sit down and address individual issues with employees? Are they doing more than the annual review kind of feedback?
- C Are they meeting with employees on a regular basis and passing down information?

The strategies identified were good; however, as a means of clarification, specific examples of what could be expected to happen should be added.

Another strategy is that HR wants to be at the table for strategic discussions – that may need to be a goal, or stated more directly.

The credibility and “believability factor” of the goals need to be addressed. If an EPA employee reads these goals, will he or she believe them? Ms. Bowers said some employees might not believe the goals but will watch and see what happens. Strategic measurements will provide a sense of how employees and other members of the workforce perceive how things are going. Then, items that are unfavorably perceived should be prioritized for correction. The Workgroup concurred that the first goal should be the most important

***Workgroup Sessions on  
Approaches for Integrating EPA's Key Planning Processes***

**Wednesday, November 8, 2000**

**Attendees**

***NACEPT Council:***

Mr. Robert L. Rhodes, Jr.  
Ms. Patricia Bauman  
Ms. Dorothy Bowers  
Mr. Mark Greenwood  
Mr. J. Leonard Ledbetter  
Ms. Patricia K. Wood

***EPA :***

Mr. Derry Allen  
Mr. Jay Benforado  
Mr. Brion Cook  
Ms. Sharon Furrow  
Ms. Judy King  
Ms. Gwendolyn Whitt  
Mr. David Ziegele

***Facilitators:*** Dr. John Ehrmann and Ms. Barbara Stinson, Meridian Institute

The objective of the sessions objective is: To engage in a facilitated dialog to discuss the definition of the term "integration"; and how the integration of key planning processes is implemented in large organizations. The purpose of this Workgroup was not to figure out the substance of EPA's Strategic Plan, but to give the Agency advice on the process of creating linkages.

Mr. Rhodes outlined the process for the Workgroup meeting. The first part of the meeting was a facilitated discussion on the integration process in long-range planning, led by the Meridian Institute facilitators. Ms. Dorothy Bowers from Merck & Company described her company's strategic and human resources planning strategies. Then, the Workgroup discussed the next steps in preparing its report to the NACEPT Council.

Dr. Ehrmann, as moderator indicated a concern for how the Agency was going to look at future planning processes, if three to five years was the extent of long-range planning. Mr. Ziegele, responded that due to political changes in the Administration, it was difficult to plan beyond that time period. He acknowledged that some of the programs, such as ambient air quality, would require 12-15 years to obtain a standard based on research. Mr. Greenwood added that the Clean Air Act is a 30-year legislation which allows for building a research and development function.

Mr. Ziegele commented that for Human Resource planning and Information planning, the time frame needs to be more than three to five years. The problem is that the Agency hires people who have the

skills that are projected to be needed in the next three years. Mr. Greenwood remarked that when programs change, the Agency still has the people who are skilled in an area that is not needed. Dr. Ehrmann asked if the Agency had a briefing paper or graph that describes the process.

Mr. Benforado responded that EPA does not have a system for long-range planning over five years. The problem areas are similar to those described by the Comptroller General of the US, i.e., partnerships, results-oriented, cross-boundaries integration, and externally-focused. EPA is results-oriented, but needs help in the other areas.

EPA cannot do strategic planning in a vacuum, because it has to consider Congress, the new Administration, external groups, the states, the environmental community, and the legal aspects. Mr. Ledbetter said that the private sector had to consider the shareholders, the competition, customers, etc., which is a similar problem, and they are able to do long-range planning.

Ms. Bauman added that EPA needs to build constituencies over time to transcend the vagaries of legislative and administrative changes. In 20 years, EPA might be interested in new approaches to clean air that are not part of the Clean Air Act.

Ms. Whitt, asked for a definition of the term “integration” and whether integration was part of strategic planning for human resources, information, and technology planning in the private sector. Dr. Ehrmann said there is no standard definition, but that integration included informal communications, feedback, and an overlay of time dimensions. Integration planning should be a part of strategic planning.

It was agreed that human resources planning and information technology had to be integrated into any overall strategic planning. Mr. Ledbetter related his state government experience in planning in which, with the help of a facilitator, all of the key players — information manager, human resources and budget manager, and the line managers for all of the wild life resources and state parks and environmental programs — developed the vision, the mission, and a strategic plan. They brought in an advisory group representative of industry, government, environmentalists, etc., and worked on integrating the process. The plan was presented to the Governor, who put it in the budget and presented it to the legislature.

The plan was eventually implemented when the key legislator became Governor. The plan was able to integrate the impact of population growth and the economy on natural resources. There are some states, such as, Oregon and Florida, who have done strategic planning relating population growth to environmental problems. Mr. Ledbetter noted that in the private sector, the problem was in the implementation of the plan.

Mr. Benforado asked how can EPA set strategic goals in a long-range plan when there is conflict about its mission? Outside influences are not always helpful. As an example, the Enterprise for the Environment tried externally-focused strategic planning on environmental protection for a 10 to 20 year period, but it did not really work. EPA needs to do long-range planning with the programs but it may not lead to integration. The Workgroup could provide the Agency with ideas about how to make some incremental progress toward integration.

Mr. Greenwood stated that since the Agency already does planning, as required by GPRA, it is a matter of improving and integrating the planning that is done for three to five years. Mr. Benforado

acknowledged that there are external trends that will force changes at EPA. The Agency has trouble connecting with external trends, if they do not fit into its structure. Current planning based on how information technology can make the Clean Air program better, is used as opposed to external trends. For example, in the future the public will be asked for whole facility information, not just basic information.

Mr. Ziegele said the Agency needs to do things in an integrative way, looking beyond its current statutes and programs without being accused of overstepping its authority. Mr. Greenwood stated that the Agency currently had the political consensus to look at whole facilities. Dr. Ehrmann commented that often agencies do not marshal all of their political, strategic, and technical resources in operationalizing new concepts.

The discussion was concluded by postponing the definition of “integration” until after the Workgroup meets with other key EPA managers. The rest of the session was devoted to a discussion of the criteria for good planning.

Ms. Stinson discussed a handout which listed the criteria, characteristics and key elements of the integration planning process, and asked for the Workgroup’s reaction.

She stated that the list and discussion is the first step in creating a checklist for EPA staff and advisors who will be working on this integration process. Ms. Furrow suggested adding, “outside constituencies and external stakeholders” to the criteria of effectiveness.

Mr. Rhodes asked if the Agency engages the legislators in advance of the appropriations process? Congress should be included in the stakeholder process prior to seeing the budget. Mr. Allen responded that the budget goes through processes at OMB and which includes on-going discussions about EPA’s programs. Mr. Ziegele added that there are a lot of informal discussions with the Appropriation staff, but the Agency is prohibited from talking about specific items while the budget is in preparation. Another problem is that White House initiatives often come in December which does not allow any time for consultation. Mr. Benforado reminded the Workgroup that the Agency cannot lobby directly for programs to the appropriations committee.

Ms. Bowers suggested that in the key elements part of the paper, the statutory constraints and authority under which the Agency operates, should be mentioned.

Ms. Stinson discussed the first section of the handout related to “critical characteristics” and “fundamental principles” of the integration planning process. First, any kind of integrated process needs to include efficiency and effectiveness of the organization. Second, there needs to be clear benefits to everyone. Third, the process should simplify and streamline lines of communication, resource decisions, and development of goals. And lastly, the process should utilize the expertise of the senior advisors and others who will be using the process.

Mr. Benforado discussed the organization of the principles related to the benefits to the individual and to the organization. Dr. Ehrmann explained that the linkage process needs to include the benefits to the functions that are involved, including the most interested parties, as well as the whole organization.

Mr. Benforado suggested including the decision-making process; because decisions have to be made that are unpopular. Dr. Ehrmann stated that unless top leadership is involved, none of the systems would work, even though some incentives are from the bottom up. Mr. Ziegele suggested making sure that one of the end points of a successful integration process is that different functions are mutually supportive.

Dr. Ehrmann reviewed some of the other criteria on the list. The decision-making process needs to link all of the programs in order to drive the program. Determining what is needed to encourage or force people to make decisions and whether they have the raw materials in terms of information is critical to make the whole system work. The last elements have to do with milestones, accountability, and responsibility, which are equally important. In terms of implementation, there has to be information and resources marshaled to implement the integration process. The integration process is about human resources, information, and strategy.

Mr. Benforado discussed a method for achieving integration that was not so regimented by rotating the senior managers so they understand the different parts of the organization. This helps to create a culture of change and the knowledge base that allows integration to happen. Managers could be given a two-month assignment in a company or a facility to affect these changes.

Mr. Rhodes summarized the discussion by stating that the it had focused on establishing over time a linkage/integration/alignment state of mind. The Workgroup would need to develop a set of recommendations or actions, with a time line to move the process along. Ms. Bauman reflected on her experience with the NACEPT self-study process during which they were not certain whether their recommendations were being listened to by the Agency.

Dr. Ehrmann suggested a three-part report to include the following:

- C      An overall vision of how the various pieces of the strategic plan, the integration processes, and the time-line fit together
- C      A set of principles and elements that have characterized success in integration planning processes
- C      Immediate actions that incorporate these principles and could start the process of integration and linkage moving forward.

He suggested that this was the next phase for the Workgroup and that it should discuss this with the managers during the second day of the meeting to test the feasibility of the process. The end result would be a useful package for the transition team, as well as, career employees. The report could be about eight pages in length.

***The Integration Process Within Merck & Company, Inc.*** - Presented by Ms. Dorothy Bowers

Merck's planning process was put in place by the CEO for the purpose of getting new products through the system and into the market, and to make decisions about what to do with products after the patent expires. The company developed a strategic plan, but did not call it an integration plan. The need to



develop a strategic plan was forced by pressure on the manufacturing division to determine priorities for all of the new products.

The impetus for the plan came from top management. The process started with a basic plan for facilities; and that also meant planning for human resources — people and their capabilities. The company first looked at what their manufacturing process was doing well because they were able to beat their competitors in getting products to market. The company studied what was important, what the priorities should be, how to allocate facilities, and how to make decisions. The company had to focus on the core of its business.

One of the conclusions was that they were in the business of bringing new, innovative, life-saving medicines to market, and not in making generic drugs for someone else to market. The company leaders in marketing in the U.S. and other countries realized that they were going to be held accountable for delivering the products; and they were the ones who realized that a human resources strategic plan was needed.

Prior to this plan, the company had separate plans for each division, but not an overall strategic plan or a human resources plan for the whole company. The process they used to develop the plan was to gather the most promising young people together and let them develop the plan. They interviewed people in the organization about the plan and the human resource needs. The first plan was not helpful to the manufacturing division, principally because the planning group did not involve them enough in determining the needed resources. At this point, the company decided to develop a human resources strategic plan to enable them to recruit and retain people to carry out the overall manufacturing strategic plan.

Action plans for recruiting and retaining employees and changing the culture were linked back to what the manufacturing organization needed in order to deliver the products. The people in the manufacturing organization, who had the accountability, were the champions of the human resource plan. The plan had to be aligned with the business strategy. The process of asking people what they wanted resulted in a wish list. The company also developed an environmental and safety strategic plan and a quality plan. These plans had to be linked to the manufacturing strategy to be useful.

### Questions and Answers

*Question:* After the need to consider the human resources was realized, to what degree did that change the manufacturing strategic plan?

*Response:* Because it was already decided that this process knowledge and skills was the company's strength, the human resources plan was analyzed, but the strategic plan was not revised.

*Question:* To what extent was information technology integrated into the plan?

*Response:* Unfortunately, the information systems (IS) people developed their own plan and it was not integrated with the human resources plan or the overall strategic plan. The IS people may not support all of the commitments in the strategic plan, so it will be difficult for a while.

*Question:* Were the manufacturing people and the people who did the strategic plan included in the

information systems strategic plan? Is part of that function the decision on what products to bring to market?

*Response:* There is another strategic planning process for that.

*Question:* Did the environmental health and safety plans come after the manufacturing plan?

*Response:* The company realized that if they wanted to put out a new product, an environmental plan is needed. The plans are not done at the same time, because some of the decisions are linear.

Ms. Bowers stated that the real driver for the Merck plan was determining what business it is in. The question EPA needs to ask is "What is it that EPA does to achieve its mission that no one else can do better?" For example, how to handle chemicals is clearly the business of government. The mission may be decided by an administrator, by the states, or by some other outside force. It is difficult to provide guidance on human resource needs when the mission might be changing. Mr. Greenwood stated that more emerging issues may be the responsibility of state, or local, or international entities.

Ms. Bauman stated that the core business of EPA is to protect human health and to safeguard the natural environment, even though air and water move across state boundaries. Mr. Greenwood mentioned urban sprawl as an example of environmental problems that EPA did not have jurisdiction over. Ms. Bauman suggested that EPA's goal in this area could be to recognize the contributions of urban sprawl to water and air quality problems. Underlying the goal is a system that drives the behavior and decisions that are made. EPA has a very strong command and control system.

*Question:* What were the decisions in the human resources plan that helped Merck to determine its major mission?

*Response:* The company had an engineering department, because it was building new facilities. When the decision was made that building was not the company's core business, some of the engineers were let go. The company arranged with other companies to manage the projects. This change was a direct result of a human resource plan.

*Question:* After the company realized the that first planning process did not work, what social technology was used to develop the new plan?

*Response:* The same people were brought together and told what the main mission of the company was; they were asked to determine the human resource needs for that mission. The resulting plan was very different and a big improvement.

*Question:* Has that experience provided a model for future planning?

*Response:* The environmental and safety plan did not follow the same steps, but everyone was made very aware of the human resource issue as critical to the success of the strategy.

*Question:* Does the company plan to keep the integration going and update the plan every so often?

*Response:* Continual review and updating was written into the action plans.

A comment was made that at EPA each unit prepares its plan and the Agency is trying to do information technology and human resources planning. Ms. Bowers responded that Merck used to do planning in that way and none of the plans had any relationship to each other.

Mr. Ziegele suggested that EPA could look more broadly at environmental problems regardless of the current statutes. The current method is to plan for programs and to project each one out to five years. Ms. Bowers said that strategic program planning includes figuring out the best way to do something, deciding how to do it, and determining what resources are needed.

Ms. Wood suggested that EPA start at the top management levels and determine the mission and then determine which unit should be implementing each part of the mission. The Agency needs to look beyond its own role to that of the state and localities or even other Federal agencies. Mr. Greenwood stated that international problems were not going to be handled by localities, so some of the responsibilities could be sorted out logically.

Dr. Ehrmann noted that Merck took a long time to find the right question. EPA needs to have processes in place so that the right questions are being asked. The right question is the one that motivates people. Ms. Bowers added that Merck hired an outside consultant to help frame the right question. Within EPA each program may have different goals and tactical strategies, but overall strategies may be the same.

Mr. Allen suggested that the group ask when human resource planning should be done centrally and within an office or program. For example, if the Office of Pesticides Prevention and Toxics Substances decides to change from focusing on specific toxic chemicals to a broader design for prevention of pollution, who identifies the human resources are needed for a major program change?

Based on the Merck experience, if a new information system is designed, EPA should make sure it provides the information that people need, and then destroy the old system or people will keep using the old familiar one.

*Question:* Should the present framework be used and then design a strategic plan to fit that framework or is NACEPT supposed to suggest a new framework?

*Response:* It would be helpful to have a strategic approach that is useful under the existing statutes and current goals and another strategic planning process to use if the overall framework is changed.

Mr. Cook stated that the same idea would work in information system planning. At present a set of options based on the present framework is being developed, but it would be helpful to have some ideas related to a broader scope.

Mr. Benforado suggested that the Workgroup develop a set of recommendations about how to go about integration in the strategic planning process. Mr. Rhodes stated that NACEPT was not going to delve deeply into any of the plans, but that evaluating alternative structural approaches and how they affect integration would be helpful.

Dr. Ehrmann suggested the following steps:

1. Develop the key points from the discussion on the vision, the principles, and the definition of

- integration for the next day meeting.
2. Decide what questions to ask the EPA managers and staff at the next day meeting.
  3. Determine what are the next steps in putting together the final product.

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**Thursday, November 9, 2000**

**Attendees**

***NACEPT Council:***

Mr. Robert L. Rhodes, Jr.  
Ms. Patricia Bauman  
Mr. Mark Greenwood  
Mr. J. Leonard Ledbetter  
Dr. Joseph Sullivan  
Ms. Patricia K. Wood

***EPA :***

Mr. Derry Allen  
Mr. Jay Benforado  
Mr. Brion Cook  
Ms. Sharon Furrow  
Ms. Judy King  
Mr. David O'Conner  
Ms. Margaret Schneider  
Ms. Gwendolyn Whitt  
Mr. David Ziegele

***Facilitators:*** Dr. John Ehrmann and Ms. Barbara Stinson, Meridian Institute

***Brief Overview of Discussion Summary***

The first part of the summary presented a definition of the term “ integration.” The next part was a graphic that illustrated the role of human resources planning and information planning as goals supporting the achievement of the overall strategic plan. Dr. Ehrmann stated that EPA is trying to achieve a set of environmental objectives that provides directionality to the three planning processes of integration, human resources, and information. The time frames are stated in terms of short, mid-term, and long-range planning. The next part includes the criteria or principles of implementation realities such as external interest groups, leadership, and decision-making. And finally, next steps are suggested for producing a final product.

***Program Managers Presentations on the Status of Planning Efforts in Their Offices :*** The planning processes currently underway in the Office of the Chief Financial Officer, Office of Administration and Resource Management, and the Office of Environmental Information. The three managers would answer

the following questions:

What would effective linkage or integration do for each office?

What would be the benefits of integration, in terms of responsibilities, in their respective areas

**Planning Within the Office of the Chief Financial Officer:** Mr. David Ziegele

*Agency Requirements Under GPRA*

EPA is required by law to prepare a strategic plan every three years, with a five-year planning horizon. Each year agencies are required to develop an annual performance plan that states what the Agency will accomplish in the coming budget year as measured under annual goals. A report to the President and the Congress is required at the end of the year. The report indicates the agency's accomplishment of annual goals during the previous fiscal year and progress towards five-year objectives.

*Beyond the Mandate*

In going beyond this mandate, EPA chose to cover all of the agency's goals and objectives and activities in the plan and the budget. For example, the Office of Research and Development has part of their budget under Goal # 8 — Sound Science and Innovation — and the other parts are found in goals #1 through #6. This is one way the Agency is trying to integrate various functions within the strategic environmental mission of the Agency.

To accomplish this the Agency has established goal teams that are co-chaired by headquarters senior managers and regional senior managers. Each goal team does the planning and performance tracking for the activities under a particular goal. The annual performance plan is integrated with the budget into a single document. The performance report for FY 1999 was put into a long-term context using the performance plan. This also gives a better opportunity to tell the Agency's story, both positive and negative.

For FY 2000, EPA will develop an annual report that goes beyond the GPRA performance report. The 2000 report will integrate financial statements with the annual performance report, so that budget costs and results will be linked under the mission.

*Integration Processes*

On integration, human resource planning and information planning is part of the Agency's strategic plan and performance report. In Goal 10 there is extensive coverage of the workforce capacity efforts, and in Goal 7 (which is "the public-right- to-know,") is quality environmental information, which is related to the strategic goals of the new Office of Environmental Information (OEI). Since OCFO is responsible for the strategic planning process overall, the staff participated in the Futures work of the OARM and its Workforce Capacity efforts.

OCFO staff worked with OEI to realign Goal 7 around the more strategy-approached information and they are collaborating on the information plan. The Agency wants to ensure high quality performance data that is results-based and useful to the public.

*Benefits of integration and strategic planning:*

The benefits include the ability to reach agreement on outcomes and have those decisions reflect stakeholder input. Success is viewed as having as much of the Agency's work and functions aligned in order to achieve the agreed upon goals. The main benefit of integration is to have most of the functions supporting each other and heading toward the long-term environmental goals of the Agency.

### **Human Resources Planning in the Office of Administration and Resources (OARM)**

Mr. David O'Conner began his remarks by saying that until two years ago there was very little human resources planning occurring. He explained why EPA began to address HR strategic planning; the approach; what the focus was, and what additional steps needed to be taken. It has been difficult to get management to focus on human resource issues. So when the opportunity arose, HR planning engaged senior executives by forming a human resource council.

One of the main dynamics behind the emphasis on HR planning was the aging of the workforce at EPA. Other aspects were the need for diversity; the lack of management skills on the part of supervisors as compared to their technical skills; an overbalanced supervisor to employee ratio; and the need to upgrade supervisors in changing technologies.

The OARM embarked on a human resource effort called a *Reinforcement Development Strategy*, with the assistance of several Futures consultants, to envision what the agency would look like in 20 years, especially in dealing with states and localities. The type of skills needed over the next 20 years was factored into the vision. The focus was on the need for cross-cutting skills that would enable a technically-oriented employee to be more effective at working with the environment and the community. The support staff also may need new leadership skills for the next 20 years.

The Human Resource Council (HRC) has overseen the workforce development strategy planning. Recently the Office of Human Resources made a budget proposal to fund these efforts. The planning effort and the budget plan were universally endorsed by the HRC and OARM. There is broad support for the HR strategic plan and for funding it through the budget. OARM still has to answer some difficult questions from OMB and GAO about workforce deployment, the numbers of workers, and the specific skills needed in the workforce.

#### *Benefits of integration planning:*

Bringing discipline to HR planning and more attention to HR issues. OARM can now focus on the numbers of workers needed, where they are deployed, and the technical skills that are needed to move the Agency forward.

#### Question and Answer Period for Mr. O'Conner:

*Question:* Is the process Mr. Ziegele described helping OARM become more visible and more credible?

*Response:* The offices are working well together and just having the HR plan in the strategic plan gives more visibility.

*Question:* Is OARM receiving communications from the program managers on specific media programs?

*Response:* Some of the senior managers are taking the work of the HRC back and working within their

own offices and others are not. One of the most recent forces for change was related to charges of discrimination. Out of that difficulty came a commitment and a push from the Administrator to focus on the human relations issues of how we manage and treat employees.

Mr. Ziegele stated that until a few years ago the HRC was made up of human resource personnel from headquarters and regional offices, but now the members are senior executives, and human resources is seen as part of senior management's authority. Mr. O'Conner said that now the connection between OARM and the HRC is much closer. The result of which was to jointly develop a workforce development strategy that was accepted by the Agency.

*Question:* How do you deal with the long-term strategy of the agency in terms of workforce deployment and the uncertainty of the future?

*Response :* The Agency developed several different scenarios and tried to find common themes and cross-cutting skills that would be present in any future direction. EPA would like help from NACEPT in dealing with unknown future directions. Mr. Ziegele stated that the Agency used to look for technical skills, but since it has engaged Futures work, EPA realizes the need for people with broader skills, such as negotiation skills, communication skills, and project management ability.

*Question:* Is HR strategic planning centralized or decentralized as in the Clean Air program and in Region I?

*Response:* HR planning is moving in the direction of centralization. EPA has an overall Agency strategic HR plan, which we never had before.

## **Planning Within the Office of Environmental Information (OEI)**

Ms. Margaret Schneider stated that one of the main goals in creating OEI was to make sure that the agency was looking at information as a strategic resource. In the creation of the Office, several related parts of the Agency were incorporated, such as, the TRI inventory program and the Telecom infrastructure. The Office is developing new policy around such issues as privacy and security.

The OEI created an action plan based on an assessment of the transferred employees' skills and the old and new activities, especially those that had high priority. OEI was the only office that made significant changes in the Agency's strategic plan to ensure timely and accurate information for decision-making and to build a solid infrastructure for the Agency.

In looking toward the future, several forces are driving planning:

- C Developing the technical aspects of E-Government
- C Designing the hardware and software for the 21<sup>st</sup> Century
- C Aligning the Agency's networks and platforms
- C Deciding what information is needed to make decisions based on current statutes; move to outcome-based measures; and to adapt to future changes, such as the need for multi-media
- C Evaluating and planning for filling significant data gaps
- C Deciding the data and information role of EPA related to other Federal, state and local governments.

People with new skills are needed to move into the 21<sup>st</sup> Century. OEI will be working closely with OARM to determine the human resources needed to fill the data gaps and new program areas. A new infrastructure and management skills will be needed to develop a telecom program, for example. Some of the new skills will come from new employees and some from training current employees.

### **Question and Answer Period for Ms Schneider**

*Question:* Is it part of OEI's strategic planning to integrate state environmental data into the national database and make this information available to the public?

*Response:* One of the Office's successes this year was to build partnerships with the states. OEI is working towards a national environmental information exchange network. This network will use technology that will create a flow of state data that will be more available to the public, and to EPA to do national aggregations; and would allow for higher quality-based data standards. At present, there is a problem with different definitions and standards for reporting and this makes a big difference in terms of whether there are violations or enforcement actions. The President has requested \$30 million to work on this next year and EPA will receive \$5 million of that.

*Question:* If the budget is reduced in the new administration, how will EPA be able to fix the problems with the old legacy system, which is known to have many problems, and also deal with the lack of skills of older employees?

*Response:* The current state of the legacy system is a problem, because no one has confidence in the



quality, timeliness, or compatibility of the data. The legacy system is based on individual programs and consists of a lot of stored historical data for each program. Under any administration, the need for high quality and appropriate data available to the public would be important. More funding will be needed to invest in a new approach to improve the data system. The states are moving ahead and at the national level a network system needs to be developed so that the public and companies can get state and national data on one system. To truly inform the public, multimedia kinds of data are needed on a geographic basis.

Ms. Bauman commented that stakeholders need to be brought into the process of strategic planning to build a constituency for strong Federal data capacity and information programs.

Ms. Schneider stated that the issue is whether there is a shared vision by all of the stakeholders that environmental information be more transparent, better linked, and more accessible.

Mr. Benforado stated that the new administration would adopt improving the information system as one of their key strategies. The Agency has to move into the electronic age, with E-Government, for permitting and other interactions, to increase public access.

*Question:* To what extent do the current human resources and information plans make the links between planning and budgeting?

*Response:* First, there is no information plan, but there is a network vision that will be discussed with stakeholders in a few months. EPA does not have a plan for the role of electronic government and how it relates to day-to-day business. The Agency can link the money it is spending for better data quality and information flow to Goal #7, but to start a new project, new funds will be needed. There are offices that are sharing information like the Air and Water programs, because they are linked in the environment. The Agency is beginning to understand its own interconnectedness and how one program's information could be useful to another program.

*Question:* In the Agency's planning and budget submissions under Goals 1-6, should there be something that deals with information exclusively?

*Response:* If the programs need outcome measures, that would lead to the need for data to measure it, but good data on the quality of streams is not available.

Mr. Ziegele stated that the new team could keep the same goals and ask about the data quality and gaps for achieving certain goals. Integration would be missed with this approach, because each program would provide its data. The links between the impact of waste management on drinking water would not be possible.

Mr. Rhodes reminded the Workgroup that its goal is to develop recommendations that would enhance or improve alignments, integration, and linkages both in the near-term and long-term. Whatever the new administration wants EPA to do, effective human resource planning, training, and utilization will be important. Electronic-government cannot be ignored either. He asked, instead of waiting for the new administration to tell the Agency what to do, are there short-term integration and planning issues that the NACEPT and the Agency could communicate to the transition team?

*Response:* It would be helpful for NACEPT to offer some practical principles or processes of integration for the new administration. The senior officials will be providing a set of options for the transition team, but these options do not exist on paper yet.

Dr. Sullivan brought the discussion back to integrating the information planning with the broader cultural environment. In both the academic and industrial environments, participatory management is recognized as the best management style. People are motivated to take action when they have had a voice in decision-making. Integration depends on creating a cultural environment where participation, consensus-building, supporting others, and sharing information are valued. He asked whether the EPA senior management values this type of cultural environment and whether they are trained in participatory management?

*Response:* The senior management recognizes the need, but have to deal with statutory deadlines for their specific program. Also, there is a lot of fear of changing a system they are used to and this will take a long time to change. They are afraid that if they go to an integrated system they will lose the data they need to make decisions and run their programs. There is also a conflict between the openness that environmentalists want and the industries' desire to keep information from the public.

Mr. Benforado described the conflict between the need to operate a program with the present budget and the need to do future planning for which funds do not exist. However, the need for electronic information-sharing and public access exists and has to be dealt with. Dr. Sullivan suggested that a plan is needed to overcome resistance to change in the Agency. Ms Bauman suggested looking at some previous plans for multi-media and cross-media approaches that were developed by previous administrations. The Agency needs to take leadership in mediating conflicts regarding confidential business information, because integration planning cannot ignore these conflicts.

Dr. Ehrmann suggested the generation of ideas for integration in the short term and the need for program offices to integrate human resources and information in their planning processes could be proposed by the Workgroup. Dr. Sullivan suggested that any recommendations from NACEPT should be framed in a positive and constructive manner.

Mr. Ledbetter suggested developing a short list of priorities to integrate human resources and information into the strategic plan. Mr. Rhodes suggested focusing the report to the Agency and the transition team on the fundamental issues of personnel and technology which are needed to solve the environmental problems.

Dr. Ehrmann suggested that the workgroup discuss the following:

- C Human resources and information issues critical to accomplishing the Agency's strategic goals.
- C Program planning to integrate information and human resources and link them to the GPRA process.
- C Development of planning for human resources and information by building on current needs, but keeping the broader vision in mind.

Mr. Ziegele agreed with the use of GPRA to link human resources and information with program plans and policies. Dr. Ehrmann added another idea about the importance of alignment and timing. Both the base programs and the vision need to be addressed in any recommendations. Ms. Schneider suggested

adding a definition of E-Government, which was broader than just information-sharing. It included having appropriate information of the right quality, at the right time

Mr. O’Conner suggested that NACEPT add its voice to the importance of linking human resources and information by articulating the reasons for doing this. Statements from this Workgroup would also be supported by the NACEPT workgroup on Workforce Capacity.

*Question:* Are the EPA managers assuming that a massive investment in upgrading information technology would reduce personnel costs due to efficiency?

*Response:* The working capital fund could be used for new equipment, but any future planning needs would require cost approval. Program managers are not really thinking in terms of long-term investment and rarely suggest decreasing the level of full-time employees. In the short-term, however, there is a need to move the legacy system into an overall integrated information system, which would require a lot of data standards work. This would come out of appropriations, not the working capital budget. To develop an integrated system with a central data exchange portal where all information flows through one portal rather than 30 different sites would require a new appropriation.

Ms. Stinson summarized the Workgroup’s discussion with the following points:

- C There are two critical issues facing EPA — E-Government/information planning and human resources planning
- C Planning for these issues should be linked to GPRA and strategic planning processes.
- C Program offices should be looking at human resources and information needs in the budgetary and long-range planning processes.
- C Based on those assessments and the overall Agency vision, the Agency should develop long-range strategies that specifically address or integrate human resources and information technology needs as they relate to the Agency’s goals.
- C The Agency should use the principles and criteria for effective planning that were developed in the previous session.

Mr. Greenwood suggested adding as a first step, to look at the overall structure and framework of the organization and the strategic plan to determine whether everyone agrees with the general framework. Secondly, rephrase the issue of information to state: “*The information technology and E-Government are relevant to all of the goals in EPA’s strategic plan.*” Goal #7 of the Agency’s plan needs to be recognized as part of information technology, because it relates to the public’s right to know.

Several members thought that human resources planning should be highlighted separately from information technology to make it more visible. The idea that investment in human resources is critical now more than ever because the workforce may decrease in size should be stated.

Mr. Benforado expressed concern that what was being discussed was too internally-focused on present programs, rather than the major cultural changes in human resources and information technology which may impact the direction of the Agency. Mr. Greenwood stated that those kinds of ideas would be appropriate in a re-thinking of the strategic plan, but that the present strategic plan is linked to real issues and EPA’s present activities. Ms. Bauman stated that regardless of the future, better integration is

needed to achieve the goals of environmental protection.

Dr. Sullivan agreed that the statement should begin with an expression about where the agency is going and how human resources and information planning is critical to the agency's future, before going into the specific programmatic issues. Mr. Ledbetter suggested adding a third bullet relating to the process of getting the transition team to focus on the need for integrating human resources and information technology into the Agency's plan. One way would be to suggest that the Chairman of NACEPT work with the Agency's senior leaders during the early stages of the transition. The recommendations should be prioritized and related to the first two bullets on the list.

Dr. Ehrmann stated that both a process of encouraging senior managers to focus on human resources and information issues and a set of written recommendations could be effective. The present needs for integration should not be ignored because it is not happening now. Mr. Greenwood reiterated the need to encourage EPA to focus on the changing environment and future trends, and re-thinking the present programs to incorporate these changes. He saw this as a process recommendation which would lead to strategic planning.

Mr. O'Conner stated that setting the stage in a broad sense and providing reasons for the importance of integration was the best way to start. He also suggested making a statement about what has been done in the last two years towards integration.

Dr. Ehrmann proposed an outline and the general flow of the paper including the current discussion. The statement would include the reasons for establishing the Workgroup, the process of looking at the issues, the Agency's progress on integration, and the Workgroup's vision for the Agency's future. An offer could be made to be of assistance to the transition team. He reminded the group that their statement would be presented to the NACEPT Council for consideration during the plenary session, not directly to the Agency or the transition team.

He discussed the longer-term charge for the Workgroup. The first step would be to continue discussions with the three organizational units about existing processes. Meridian Institute could be involved and then bring the information back to the Workgroup. The next focus would be on longer-term suggestions.

Ms. Schneider expressed concern about the timing and appropriateness of continuing to make recommendations before the new administration was in place. Mr. Greenwood suggested that at this point, the Workgroup could only make general recommendations and wait for the reaction from the transition team. The Workgroup could also brainstorm ideas about the importance of the NACEPT concept in bringing in the private sector to provide expertise to EPA on strategic policy and technical issues.

Mr. Greenwood noted that there are two transition phases. The first one having to do with a new President, new policies, and new agency administrators. The short Workgroup paper could be useful during this stage. The second phase occurs when a new administrator is in place, which would not happen for several months. Ms. Wood agreed that the group should develop recommendations for the second phase.

Dr Ehrmann suggested drafting a letter as outlined. In the course of drafting the letter, one-on-one

consultations or a conference call could be made to decide the next steps.

***U.S. Environmental Protection Agency  
National Advisory Council for Environmental Policy and Technology (NACEPT)***

***Emerging Trends and Issues Workgroup***

***Meeting Summary***

***Wednesday, November 8, 2000***

***Workgroup Attendees:***

Ms. Linda Hixon, North Chickamauga Creek Conservancy (Workgroup Chair)  
Dr. Carlos Arce, NuStats Research & Consulting  
Mr. Gary Ballesteros, Rockwell International Corporation  
Mr. David Fees, Delaware DNREC  
Dr. Fred Henderson III, HENDCO Services  
Mr. Charles Jones, Douglas County, Kansas  
Mr. David Marsh, Marsh Plating Corporation  
Ms. Wilma Subra, Louisiana Environmental Action Network  
Mr. Richard Sustich, Metropolitan Water Reclamation District of Greater Chicago  
Dr. Valerie Petit Wilson, Tulane University Health Sciences Center

***Consultant:***

Mr. Steven Kenney, Toffler Associates

***EPA Representatives:***

Ms. Sonia Altieri, EPA, Office of Cooperative Environmental Management, Designated Federal Officer, NACEPT Emerging Trends and Issues Workgroup  
Mr. Michael Brody, EPA, Office of the Chief Financial Officer  
Mary Louise Hewlett, Office of Prevention, Pesticides, Toxic Substances  
Mr. Jim Ketcham, EPA, Office of Air and Radiation  
Mr. David Lyons, EPA, Office for Enforcement and Compliance Assurance  
Mr. Pasky Pascual, EPA, Office of Research and Development  
Mr. Alex Wolfe, EPA, Office of the Chief Financial Officer  
Mr. Bryan Wood-Thomas, EPA, Office of International Activities

Ms. Hixon, Workgroup Chair, welcomed the workgroup members and the EPA representatives to the breakout session. She recognized the dedication of the workgroup members, and acknowledged their efforts in the past month. The members prepared drafts of issue papers for the interim report. Mr. Ballesteros prepared the executive summary and served as editor for the entire report. He also researched corporate models for identifying emerging trends and issues. Dr. Arce drafted a process of identifying emerging trends and issues.

She thanked the EPA representatives for their participation in the meeting, including Alex Wolfe, Michael

Brody and Mary Louise Hewlett. She noted that Ms. Altieri had contacted several EPA staff who work on futures issues from the Office of the Chief Financial Officer (OCFO), the Office of Research and Development (ORD), the Office of International Activities (OIA), and the Office of Air and Radiation (OAR).

Ms. Hixon stated that the objective of the meeting is to compare the ideas of the workgroup presented at the September 2000 NACEPT planning session to what the EPA is currently doing related to futures work. In addition, the ideas of the workgroup are to be compared with those from an external futurist for trends that may or may not be related to the environment. Steven Kenney, a futurist from Toffler Associates, will present these trends and facilitate a discussion among workgroup members in order to refine ideas and prioritize trends.

### ***Presentations and Dialogue with EPA Representatives***

#### **Historical Perspective of the EPA's Strategic Planning Process:**

Mr. Wolfe provided the members an overview of his strategic planning background with the EPA. He was the Project Manager of the EPA's strategic planning process for the 1997 and 2000 plans. He has also helped the agency to develop strategic plans for the Office of Air and Radiation.

The actual concept of strategic planning stems from the passage of the 1993 Government's Performance and Results Act (GPRA). Strategic planning is focused on the agency's mission of protecting human health and the environment. Prior to GPRA, the office responsible for collecting strategic planning information from the program offices was the Office of Program Planning and Evaluation (OPPE). The process involved the Deputy Administrator and OPPE requesting that each program office submit their strategic plan, identify priorities, and accomplishments over a 5 year period. OPPE would then focus on a shorter time horizon of 2 years. What are the principal priorities for program offices in the next 2 years? He provided an example from the Office of Air and Radiation whose priorities are driven by the statutory requirements of the Clean Air Act.

After information from each program office was collected, OPPE developed a guidance document entitled the Agency Operating Guidance (AOG). The AOG identified key program priorities and key target activities for the upcoming fiscal year. These were called Strategically Targeted Activities Report Systems (STARS). Each office identified the work that headquarters would accomplish whether it was rule, guidance production, or field production in working with state and local governments. The last plan under this pre-GPRA system was in 1995.

Mr. Wolfe then described the strategic planning process under GPRA. This act was enacted into law in August 1993 mandates that each federal department and agency develop a five-year plan. The plans would include a mission statement, goals, and strategic objectives. The guidance for developing the plan was embodied in what the Office of Management and Budget issues (Circular A-11). In addition to the five-year plan, each agency must develop an annual performance plan to identify the annual performance goals and measurements. Agencies must also generate a corollary set of annual performance measures to link directly to the strategic objectives.

The other component of GPRA is the annual performance report which reviews the annual performance goals and evaluates whether the goals were reached. For example, did we achieve what we said we were going to do in terms of clean water? What was the outcome of our efforts in terms of the resources we are using and applying? He recommended that the workgroup members review the reports listed on EPA's website under the Office of the Chief Financial Officer. The first annual performance report was completed in March 2000.

Mr. Wolfe noted that the first strategic plan was issued in September 1997. The current strategic plan

covers the years 2000 to 2005. He provided a historical perspective on the EPA goals and how they were established. Preceding the EPA's strategic plan, there was an effort underway called the National Environmental Goals which identified a set of 12 environmental goals for the nation. This effort involved a huge amount of consultation with a broad array of stakeholders. The 12 goals were collapsed into 10 goals which now embrace the work of the Agency. No one goal was given priority over other goals, whether it be for clean air or clean water. Each goal is equally important in order to protect human health and the environment.

He explained the architecture that evolved from the first strategic plan. In addition to the broad goals, a set of objectives, sub-objectives, and performance goals were developed under each goal which were measurable in quantitative terms. The plan sets clear priorities for the next three to five years, and it is tied directly to the laws that are passed by Congress. There are some areas that involved more than one program or cross-Agency programs, such as environmental justice, children's health, and working with American Indian tribes. These areas involve different units working together. For example, someone from enforcement can get involved in strategic planning discussions with the Office of Air or Water.

Mr. Wolfe stated that once a year, in the Spring, the Deputy Assistant Administrators and the Deputy Regional Administrators meet with the Deputy Administrator and report on goal achievement and use of resources. If the goals are not being met, then they are asked what is needed in terms of multi-year goal planning and resources to achieve results. He added that implementing a change of an action today often doesn't surface for many years.

The EPA's Planning, Budgeting Analysis Accountability System (PBAA) takes into account the linkages that occur between the strategic plan, the goals and objectives to the annual goals, the annual plan, and the costs of implementing the plan.

To produce the current strategic plan, the EPA initiated an agency-wide workgroup approximately 18 months ago. The workgroup came up with a set of recommendations. When reviewing the proposals to revise the Agency's strategic plan, the Chief Financial Officer identified three issues:

1. The structure of the plan would not change.
2. A huge investment was made in the financial management system, which links the strategic plan to the budget.
3. The political reality is that the plan may have to be revised for FY 2001.

It was noted that the EPA was one of the only two federal agencies that has linked their strategic plan to the budget. This linkage is critical to the EPA's current financial management system. In the appropriations language for 2001, it directs the EPA specifically for another strategic plan in September 2001.

Mr. Wolfe described the process of revising the EPA strategic plan over the past 18 months. The EPA met with the Environmental Commissioners of each state, asking for their input on the strategic plan. The EPA also met with Congress in March and August which is part of the consultation requirement of GPRA. The Agency received about 300 comments for the current strategic plan. Internally, the process to develop a strategic plan is very involved. It takes about 12 to 14 months to complete a strategic plan.

The present strategic plan has 23 outcome statements. About 15-20% of the sub-objectives are environmental outcomes, the rest are outputs. GPRA calls for striving towards environmental outcomes, but it's recognized that a balance is needed between outcomes and outputs. Some of the programs describe their strategies in terms of where they are going, how they will get there, and relate the strategies to the goals. If we are not moving in the right direction, what might the targets be? What is key? How do you motivate the agency to identify a set of things that are critical?

The major structural change in Agency planning was the creation of the Office of the Chief Financial Officer (OCFO) which merged strategic planning with resource planning in 1997. David Ziegele is the Director of the OCFO Office of Planning, Analysis, and Accountability. Mr. Wolfe is a member of the planning staff whereas Mr. Brody is a member of the analysis staff. The accountability staff focuses on the annual accountability report. What did we do? How did we do? Did we meet our general targets?

The strategic plan is the umbrella over the work of the Agency. Goal and multi-year planning gives the EPA the annual plan which is linked to the budget and to the work of the regions. Memorandums of Agreement are negotiated with state offices through the National Environmental Performance Partnerships System (NEPPS). The NEPPS is linked to performance partnership grants, which indicate what states and tribes are doing in terms of meeting the national priorities.

Mr. Wolfe concluded by stating that there is a tremendous amount of political and public involvement in the process of developing a strategic plan. EPA has some 70 oversight committees, more than any other governmental agency, so engagement is intense.

### ***Question and Answer Period***

Dr. Henderson requested copies of three charts and commended Mr. Wolfe on his presentation.

Dr. Wilson inquired if the year 2001 annual plan would be based on the new plan or a plan waiting to be developed. Mr. Wolfe responded that the strategic plan sets the framework of the annual plan, and the 2001 plan has been completed. It can be found on the EPA website.

Dr. Wilson asked that if new discoveries or approaches emerge in a 2-3 year span, how will the trends be integrated into the performance plan. Mr. Wolfe stated that if the trend or issue is identified as something important for the Agency, it could be identified as a new initiative or a priority for the Administrator. Each office would be asked to address the issue in terms of its applicability to their office. If found to be applicable, it would be reflected in their annual plan. The issue would also be reflected in those offices which issue national guidance annually. If accepted, the issue would be articulated in a performance goal with measurements for achievement.

Ms. Subra commented that they have been doing sector-specific work since 1994, and asked how sector-specific work is being incorporated within the planning process. In response, Mr. Pascual replied that one of the objectives within goal #8 is to engage in sector planning.

Mr. Fees posed three questions: "Are the 10 goals in the current plan the same as those in the 1997 plan? Is it expected, barring some major change, that these will be the goals? What if the programs come up with new ideas?"

Mr. Wolfe said that the goals are the same as the 1997 goals and they would probably not change. If programs come up with something new, such as a new standard, they would articulate the work that had to be done and revise the objectives, sub-objectives and mechanisms. He gave an example of the new emphasis in watersheds. He also mentioned that goal #7 is entirely different because of the creation of the new environmental information office. How is the EPA going to manage the information? How is the EPA going to articulate it to the public?

He concluded by stating that some of the top level initiatives come from the Administrator, and those are incorporated into the plan revision. These consist of cross-goal and cross-agency initiatives. Anything new within a program would be proposed by the program office.

### **Alternative Environmental Futures Group**



Ms. Hixon introduced Mr. Brody, Office of the Chief Financial Officer who spoke about the alternative environmental futures group. Mr. Brody said he would talk about some of the longer term aspects of planning which have been instituted. He acknowledged Ms. Street for her prominent role in the futures work. She was unable to attend this meeting due to her attendance at a UNEP meeting in Boston.

Mr. Brody stated that the present EPA plan was a good one, but that it was not based on the rapid changes occurring in the world in terms of rapid population growth, technological innovation, economic growth, and globalization. Mr. Brody then proceeded to use a series of slides in his presentation on the future trends and issues. In terms of environmental protection, the Agency would like to anticipate and prevent problems rather than wait for pollution to occur and then have to clean it up as in the Superfund program. This type of planning is termed *futures analysis*.

One of the first futures analysis for the Agency was completed by Peter Swartz at the Shell Oil Company in 1975. Mr. Brody noted that it was an excellent example of good work that was shelved and unused by the EPA. The Shell Oil Company was the first group to accept the scenario planning idea that had been developed through the military. This brought the company away from conventional and quantitative forecasting.

Futures analysis is a way of planning for what you think might be happening in the next five to ten years. What is happening in the world? For example, one of the emerging environmental issues is biotechnology which will drastically change what's going on in the world. EPA is now looking at plant-produced pesticides to understand their impact on the environment. This type of thinking can improve strategic planning by making a five-year outlook, not predicated upon what you think you know today, but what you think may be changing.

Mr. Brody discussed the actions taken by EPA in past years. The EPA had produced a futures report in 1995 entitled *Beyond the Horizon: Using Foresight to Protect the Environmental Future*. Although this report received more attention than the 1975 futures report, it was not immediately acted upon. He stated that the Agency has to work on integrating new information and planning into our projects, and suggested that NACEPT may want to contribute to this effort. The Office of Research and Development (ORD) is trying to help institutionalize a scanning process. The Office of International Activities is bringing people together to discuss future issues.

He explained the three common futures methods are scanning/lookout panels, trend extrapolation/modeling, and scenario building. Scanning is the systematic and continuous review of news about current scientific, technological, sociological, and institutional developments important to the environment. Look-out panels consist of a group of individuals in relevant fields who scan information and identify noteworthy trends. Trend extrapolation projects future conditions based on assessing past trends and extrapolating them by adjusting time-series variables.

Trend extrapolation uses simple mathematical projections, whereas modeling involves numerous variables and complex calculations. Examples of trend extrapolation include population growth and estimates of global climate change. Mr. Brody added that the world doesn't change in precise ways, and that we have to open to all of the surprises. Many of the models aren't necessarily constructed to be open to surprises.

Scenario building are qualitative projections of possible future conditions based on variation in the interaction of key drivers of change (social, technological, economic, institutional). This method ranges from very broad combinations of drivers that describe various world views to more specific stories about the impact of drivers on particular issues. EPA's Workforce Assessment Project, the Science Planning Project (ORD/NAPA), and the Office of the Chief Financial Officer (OCFO) have utilized scenario building. EPA/OCFO has used a model of scenario development patterned after the global business

network of Peter Swartz.

Mr. Brody noted two books that were influential in learning about futures analysis: *The Art of the Long View* and *The Future of the Global Economy: Towards A Long Boom*. He added that when considering future issues for the EPA, you must look at other areas outside of environmental issues. This includes information technology and the economy. How might that lead to change in how we operate?

Mr. Brody provided background information on the OCFO futures project which involved talking to EPA managers about their views of the future. The managers are concerned about how the EPA will be perceived in the future. They are also interested to know whether the Agency will continue to have the kind of support in the future that they have had in the past. The program managers are engaged in serious discussions about what certain scenarios might mean to EPA. He recognized that there's not an integrated process incorporating futures thinking into the strategic plan.

If the future problem areas can be defined in an environmental, scientific, and analytical way, then EPA might be able to do a good job in handling the issues. The area that the Agency will have difficulty is evaluating where we might be in terms of the scenarios. Which pieces of a particular scenario seem to be driving our country and the environment?

Mr. Brody concluded by referencing a slide entitled *OCFO Scenarios* that could be used by the workgroup as a discussion point for what EPA might do well or might not do well in the future.

Dr. Henderson asked Mr. Brody if he had any comments on how to integrate information technology into the strategic plan. In response, Mr. Brody noted that there were certain barriers to integrating a new program, because there is no consensus about what is important and no statutory authority or budget for a new program. A process is needed that would develop a willingness among managers to drop old programs so that new ones could be institutionalized.

### **Presentation and Dialogue with a Futurist (Steven Kenney, Toffler Associates)**

Ms. Altieri introduced Steven Kenney, Toffler Associates, and explained that his role is to give a 30-minute presentation on themes and issues external to the Agency that might affect the EPA within the next five to ten years. After the presentation, he would then facilitate a discussion of themes and issues presented today and those from the September 2000 meeting. It was agreed that he would help the group to identify and prioritize the proposed emerging trends and issues.

Mr. Kenney has conducted strategic and future orientated analysis for clients in commercial industries and the public sector in the U.S. and abroad. He has more than 10 years of experience advising on strategy development, strategic planning, concept and process transformation. He has focused on analyzing drivers of changing markets, organizations, and societies. He recently designed and led a series of discussions identifying critical competencies for organizations future work forces that resulted in improved integration of work force planning.

Mr. Kenney opened his remarks by stating that he would introduce ideas or themes which might have implications for the EPA in the next 5 to 10 years. His first slide illustrated four broad themes that he would discuss later in his presentation. Toffler Associates was founded by Alfred and Heidi Toffler who are known as world renown futurists. Mr. Kenney proceeded to describe the theories presented in *The Third Wave*, one of the books authored by Heidi and Alfred Toffler.

The first wave is the agrarian age; the second wave is the industrial age; and the third wave is the information age. The second wave involves mass production, mass entertainment, and mass communication. The third wave began to emerge after World War II. He stated that we are now living in the information age. The Third Wave addresses a wide variety of changes that are occurring in the

world. These waves continue to flow at the same time creating a lot of change in the world simultaneously.

The first theme discussed by Mr. Kenney was the *changing nature of constituencies* around different issues, including environmental protection. He highlighted the rising importance of individuals, small groups, and interest groups. The increasing ability of those groups to connect with one another will increase their power.

He illustrated this with the example of the protest at the World Trade Organization meeting in Seattle last year. There were over 1000 different small groups representing human rights, labor unions, and the environment protesting the conference. This coalescing of small groups over issues probably represents the future of the political economy and the environment. Minority power may become more important than majority rule. As of three years ago, there were more than 40,000 different minority organizations and international associations in the world.

The EPA will have to work with these groups and coalitions, because information technology and the Internet has enabled these interest groups to combine and recombine into different configurations around specific issues. The EPA may not be able to count on those groups that have traditionally are thought of friends of the environment. Those groups that have viewed the EPA as the protector of the environment, will see the Agency as part of the problem. The EPA will need to adjust to the fact that allies on one issues may become adversaries on another issue.

The second theme has do with *customization of product services*, as services become more and more unique and customized to the individual and by the individual. Regulatory agencies are used to thinking about things on a mass scale in uniformed and standardized ways, but the wave of the future is power shifting from manufacturers and distributors to customers. This ability to meet individual demands is due to information technology and successful companies are taking advantage of it. The environmental impact of this degree of individualization may not be obvious, except for shipping and transportation, but there will be an impact on the process of environmental protection.

The uses of biotechnology to customize pollutants on a mass scale could have an impact on the EPA's regulatory processes. Traditional inspection processes and standards won't be enough. There is a need to focus rule-making, regulation-making, and law-making processes much earlier in the product research and development process rather than waiting until something has been manufactured and deployed, and then has the potential to have an impact on the environment.

The third theme is the *accelerated and uneven pace of change*. Technology is advancing at a faster pace than laws, regulations, or social norms. Key forces that are affecting the world around us are changing at rates that are different from one another. This is a serious concern since it can affect organizations in a real and unpredictable way. For example, hackers are able to use technology to their advantage and yet the code of ethics and legal system has not advanced to the point where there is an effective deterrent. Business change has been quite rapid in the past few years as models and products are introduced, revised, and replaced in rapid succession. Regulatory agencies, such as EPA, are changing at a slower rate than technology.

Mr. Kenney referred to earlier discussions of the workgroup on moving *beyond command and control*, by helping states and localities develop the frameworks to enable them to do the job of environmental protection themselves. He asked the members if the frameworks would be sufficient for this transition to be successful. Will the EPA have a new role that's less focused on developing and enforcing laws and regulations and more focused on helping the state and local governments develop the frameworks where they can protect the environment themselves?

He described the concept of practical acumen, which assumes that the knowledge base of society that we

live is going to continue to advance exponentially. According to Mr. Kenney, our ability to apply that knowledge base in an effective way to confront social problems to pursue socially beneficial ends is uncertain. You may have the knowledge, but you may not be able to apply it in the right way because the laws or some other element is not changing at the same pace.

The EPA will need to make advances in its regulatory functions to keep up with technology changes. Due to the slowness of the political system, the EPA may not be able to apply new knowledge. Technologies harmful to the environment may be used before the regulatory and political systems can constrain their use.

The fourth theme related to *hiring qualified people* as the key factor having an impact on businesses and government now and in the future. Human capital is an emerging issue because the workforce has only begun its transformation. Different kinds of skills and competencies will be needed in the future. The fact that about 50% of the EPA's workforce is eligible for retirement in the next five years means that new people with different capabilities can be hired. Mr. Kenney showed a slide that characterized the EPA workforce at present as being made up of people with a very narrow vision, those with narrow and broad visions, and others with multiple capabilities.

People who are categorized as "T" individuals are those who have a narrow expertise. For example, an aquifer expert or an individual who has regulatory expertise. The "T" people are those with deep skills and breadth of knowledge and teamwork. The "Star" people are those who have multiple sharp points of skill, leveraging other multi-dimensional colleagues. The EPA is moving in the direction of the "Star" individuals.

In the future, EPA will need to think about leveraging its workforce with people who are not on the payroll. States, localities, individuals, and protest groups must be seen as part of the workforce. EPA will need to provide tools to enable other people to do the work themselves. It was also noted that this particular theme overlaps with the work of the other two NACEPT workgroups.

In conclusion, Mr. Kenney reiterated that the themes presented in this session were focused on how the themes impact the EPA at a macro-level and how it does business. The purpose was to introduce themes that had a less direct impact on the environment. He stated that the EPA's ten goals will remain the same, but the means and methods for pursuing those goals are going to change due to the changes outside the Agency.

### ***Questions and Discussion***

Dr. Henderson asked how the changes in genetically engineered crops and society's increasing resistance to them relate to EPA planning. In response, Mr. Kenney said that this relates to the first theme of different combinations of interest groups. He believes that the regulatory agencies in general will have to handle this new culture. It will complicate the planning and policy-making for the Agency in years to come.

Mr. Brody commented that in the September 2000 issue of the *Economist*, it was noted that the aggregations of protestors are better managed globally through the Internet than the institutions they are attacking. Institutions and agencies will need to understand the culture to understand its impact on new technology, because acceptance and use of new technologies is being dictated by cultural factors as much as their actual utility or perceived utility by the companies producing them.

Dr. Wilson posed a series of questions about how these themes will impact issues related to diversity, changes in family structure, and commitment to the environmental mission. She noted that there is a whole cohort of people who are not involved in information technology. There is a real concern about the growing digital divide and diversity. She acknowledged that groups may not hold the same connection to

the EPA's mission as compared to thirty years ago. Dr. Wilson asked Mr. Kenney if he sees the populace being connected to the mission of the environment in the same way as when the EPA was founded. She also recognized that there are single parent families and that women are entering the workforce. There are a lot of people who will not retire even though they are eligible.

Mr. Kenney responded that the digital divide and diversity will be one of the more pressing social issues of the next decade. He stated that the government will need to equalize access to information technology. The connection to the environmental mission is already there and is being facilitated by information technology.

Mr. Jones asked about the impact of the EPA's visioning exercises. What percentage of the visioning exercises at the EPA have been realized, and how can the workgroup be assured that our efforts will not be put on the shelf? What typifies organizations that do the best job of changing?

Mr. Brody responded that it is critically important that the EPA respond to future trends and not to the past. It's essential to influence those who are making policy and operating programs. Management needs to be motivated to try different approaches. He reviewed some of the past efforts in using scenarios, which may have not led to changes because they lacked internal ownership. To overcome this, the EPA created a staff network of all of the programs and regions. The senior career executives were brought together to discuss future trends, using various scenarios. They are open to the issues and recognize the need for change. He noted that scenario building exercises are designed for specific purposes, and cannot be reused.

Mr. Jones asked whether the NACEPT Emerging Trends workgroup report should identify emerging issues based on the Agency's interests and present programs or list issues that the workgroup believes that the EPA should be focused on in the future? In response, Mr. Brody replied that the most helpful approach is to focus on the future.

Mr. Sustich highlighted emerging technologies in the area of clean water. He stressed that analytical methods and the technology to analyze pollutants were expanding faster than EPA could approve the methods. In response, the EPA adopted performance-based alternatives which can be used as long as the method performs as well as the Agency's standard. He suggested that the workgroup and the Agency ought to be looking at the boundaries of what is acceptable or unacceptable in terms of the EPA's mission. This will allow more flexibility and innovation in the methods used.

Mr. Lyons noted that the Emerging Sectors division of the Office of Enforcement and Compliance Assurance (OECA) is evaluating emerging sectors related to compliance assurance over the next 4 years. He is planning to establish better communications with the private sector especially in the area of compliance assistance and assurance.

Dr. Henderson felt strongly that ownership of programs needs to be connected to budgetary appropriations. In response, Mr. Pascual said that the EPA is constrained by statutory and budget authority and limited to specific environmental programs.

Mr. Jones advocated for the relationship between the EPA and other organizations, such as states and international bodies needed to be better defined and to use a common language. It will be difficult to move forward unless these relationships are better defined and founded by trust. He thought it might be helpful for EPA employees to have a tour of duty in state government as part of their training.

Mr. Wood-Thomas agreed that the EPA is limited by statutory provisions, and these constraints extend to the states and localities. He noted that the Agency has been historically pollutant orientated. He recognized that the pollutants can be dealt with within the U.S. borders, however, the challenge lies in addressing pollutants outside of our borders.

Mr. Kenney emphasized that the charge to this workgroup to identify and prioritize the environmental problems and issues that are emerging for the EPA over the next five to ten years. The issues could be a narrow pollution problem or a social driver that leads to pollution.

The issues and categories of issues proposed by the Workgroup were as follows:

1. The relationship between the growing population and the resources needed to maintain social conditions (Sustich)
2. Demographic changes and cultural values (Arce)
3. Land use and population growth, especially the denigration and loss of agricultural land, and designation of responsibility to regulate land use (Henderson)
4. Development of Federal government policies on information-sharing like those that make non-governmental organizations (NGOs) successful (Brody)
5. Improvement in the process of decision-making so that all of the stakeholders are able to participate (Subra and Henderson)
6. Better translation of EPA documents and more information to officials in states and localities involved in environmental decision-making (Jones, Brody)
7. A method for better integrating and processing new knowledge to help consumers and professionals apply new knowledge (Wilson)
8. A framework is needed to deal with issues that are not pollution-specific (Wood-Thomas)
9. Provision of resources for compliance assurance with present pollutants before broadening the scope of the Agency and its units (Subra)
10. A focus on the chain of production from raw materials to finished product rather than on a single industry (Ketchan)
11. Address multiple pollutants at the same time rather than focus on a single pollutant (Ketchan)
12. Better baseline data about environmental pollution as it relates to a particular geographic area or a mass customization of EPA data to help localities with decision-making. (Pascual)

Mr. Sustich proposed the idea of an environmental footprint. What is the fundamental footprint of an individual? How much resources and the environment does an individual impact? The other issue is “How many feet do we have?” How many people are putting their footprint down? He stated that the former has to do with the size of the population and its trends. The latter has to do with resources we consume or we need to consume and develop in order to keep that increasing population in the social conditions that it wants to be in.

Dr. Arce pointed out that it is difficult to define a trend. He noticed that Mr. Kenney hesitated to define a trend. Mr. Arce recommended that the workgroup develop categories or broad directions of radar. In his opinion, these areas need to be defined. For example, demographic change involves the amount and the type of changes that occur within our border. Demographic change can also be defined as culture, an array of values across generations.

In regard to land use and increased population, Dr. Henderson mentioned that there appears to be a lack of management in terms of setting up standards and limits.

Mr. Brody referred to a meeting he attended with Jonathan Lash of the World Resources Institute. Mr. Lash was asked to comment on the government policies that do or do not make non-governmental organizations (NGOs) successful. Mr. Lash replied that government policies that provide open access to information determine the success of NGOs.

Mr. Jones expressed his concern about the present and future role of the EPA. He believes that the Agency can play a better role, such as giving states and local entities the environmental knowledge to make decisions. In his opinion, there is a disconnect between the federal employees and the outside world. The EPA staff doesn’t realize the lack of sophistication in the parts of the U.S. where decisions

are being made. In many circumstances, EPA's credibility and effectiveness is damaged by their inability to not respond to pending environmental issues.

The translation of information was acknowledged as critical. Building on that thought, Dr. Wilson accented the need for a process of integrating new knowledge and translating the information. Scientific knowledge will profoundly affect where we are embarking on a paradigm shift for how we deal with regulatory issues. She stated that we need to deal with these issues by looking at an outcome measure as opposed to process measure. She described the rapid changes occurring within science, and recognized that we need to have some measure of integrating new information.

Mr. Wood-Thomas brought to attention the issue of whether the EPA should have a broader mandate. At present, the Agency is an institution that deals with pollutants and minimizing pollutants. He referenced the discussion about land use, and acknowledged that discussion about futures go well beyond the traditional definition of pollutants.

From the perspective of the environmental and grassroots community, Ms. Subra noted that there are a lot of issues that the public would like the EPA to handle. This is due to the state agencies not handling the problems at hand. In her opinion, she sees the states ability to address regulations diminishing due to a lack of resources.

Mr. Ketcham commented on energy efficiency and the use of natural resources. He stated that by looking at a single industry and at the whole chain of production, there are opportunities that work economically and reduce pollution. He expressed the importance of multi-pollutant strategies, where multiple pollutants are addressed at once.

Mr. Pascual expressed concern about the lack of baseline data available. The EPA does a good job with providing data on emissions, but the Agency doesn't provide people with indicators of what their actual environmental conditions are at the local level. He made the observation that the EPA cannot meaningfully address emerging risks and cannot identify the drivers for those risks without baseline data. Mr. Jones made a plea to strengthen existing programs by having the EPA stand behind state agencies to ensure enforcement.

Mr. Ballesteros remarked that many of the issues discussed in this session were already mentioned at the September 2000 NACEPT Planning meeting. He recommended that we merge new ideas and themes with those discussed at the September meeting.

In an attempt to organize the issues addressed by the workgroup, Mr. Kenney proposed that there were three kinds of issues: (1) demographic land use and environmental problems; (2) information and data collection and dissemination; (3) EPA institutional processes. He then asked the workgroup to prioritize these categories.

Mr. Marsh stated that although the EPA may not be statutorily authorized to pursue certain issues, the Agency can certainly collect and disseminate information. Members then discussed the importance of collecting and disseminating information on present and emerging issues and linking this to institutional processes. They also discussed the role of the EPA facilitating relationships of other entities to deal with environmental drivers that were not necessarily the purview of EPA. The institutional question is whether there is an emerging role for the EPA in facilitating these relationships.

Comments were made on the facilitating role of the agency in Project XL. This project allowed people to talk about the role of environmental agencies and the need for flexibility in determining that role. Mr. Sustich recommended that the EPA review regulations developed 10-20 years ago to evaluate whether it brings value to the environment. If there is a regulation developed 20 years ago and it does not bring

environmental benefits, can we get rid of it? He emphasized the need to generate the right information to potentially influence the drivers.

Ms. Hixon stated that the EPA could be involved in establishing a structural framework for rallying the partners to address these issues.

***Thursday, November 8, 2000***

Ms. Hixon began the discussion by asking the workgroup members to review and revise the interim report on emerging issues and trends. She provided an overview of the agenda which includes a discussion on the process draft by Mr. Arce, the timeline for the report, identifying additional assignments, and deciding what assistance is needed from the EPA staff. She suggested for the workgroup to group some of the topics, prioritize them, and identify what the EPA can and cannot do under its current authority. For those topics not under EPA's purview, the workgroup could suggest ways that the EPA could facilitate other federal agencies or other entities to take action or resolve the issues in some way.

Ms. Hixon referred to the information provided by Mr. Kenney which outlines yesterday's discussion and the draft interim report. He had grouped issues into three categories: (1) drivers of environmental problems, such as demographics and land use; (2) information-sharing and targeting; (3) environmental protection processes and institutions. Ms. Hixon compared this grouping to the those proposed by the workgroup last September (holistic approaches, beyond command and control, communication issues, and substantive trends and themes). She indicated that the September grouping was more specific and useful in making recommendations to EPA than the three topics developed by Mr. Kenney. She requested comments from the group.

A lengthy discussion ensued about which issues to focus on; how to group the issues; who was the target for the report; whether the report should include EPA processes; the need for a report; and how to organize the report. Comments made during this discussion are as follows:

- C Some of the categories from the September and November meetings are overlapping, and should be merged into one document. This could be used as a framework. (Ballesteros, Wilson)
- C The items proposed in September were more specific than those proposed yesterday. The items presented on Nov. 8 were clustered which provides a context to build our specific issues. (Wilson)
- C Eco-system management (item proposed in Sept.) is different from eco-system change and the characteristics of an eco-system in which the drivers are changing its very characteristics. Eco-system management is more of a tool. (Sustich)
- C As mentioned previously, there are some issues that the EPA doesn't have the regulatory or statutory authority to do anything about. If the workgroup only focuses on broad themes, then the Agency will not take ownership for the issues. (Ballesteros)
- C Even though EPA can't take action on some emerging issues, the workgroup could list the issues so that some other entity can address the issue or EPA could facilitate or partner with others to take action. (Hixon, Fees)
- C The report could list the issues and then provide some examples of how localities are actually taking action on the issues. (Sustich)
- C The target group for the report might be other groups outside EPA and the report could include a series of actions that could influence others to get involved. (Brody)
- C The charge to the group is suggesting how EPA could become more visionary by anticipating change and preparing for change (Acre)

Mr. Ballesteros recognized that the EPA has engaged in processes to determine future trends. Building



on the question asked by Mr. Jones, he questioned how the workgroup guarantee that the report is not going to sit on the shelf. What is going to be different than what already has been done? He answered the question by stating that this group can bring a different perspective “outside the beltway”.

Mr. Brody referred to the discussion about leveraging its workforce with people who are not on the payroll. How do you influence people at the EPA? In his opinion, it sometimes comes from the people on the outside.

Dr. Arce was impressed with yesterday’s discussion on the EPA’s strategic planning process. He commented on the amount of time it takes to develop the plan, the amount of stakeholders that the Agency consulted with, and the range of other inputs. Based on this information, he interpreted the workgroup’s charge as suggesting to the EPA some way of becoming more visionary. He added that there has to be some way of anticipating change and being ready for change external to the EPA.

Dr. Wilson asked for a clarification about the 1995 EPA report *Beyond the Horizon: Using Foresight to Protect the Environmental Future*. She pointed out that this report outlines what the EPA should do in terms of determining the future, and questioned the role of the NACEPT Emerging Trends and Issues Workgroup. The report recommends setting up a panel of experts in public health, ecology, socio-economics and technology and other experts to provide observations about new trends and their possible consequences. Candidate environmental issues are screened against established criteria and selected issues are analyzed in the context of scenarios and goals developed by the Agency.

Dr. Wilson asked if the panel has been established, and what the impact of the report has been on the Agency. “If a panel has been established and it has not made any direct link to the EPA’s strategic plan or changes to the mission or changes to the action plans, then how is our workgroup going to make that change and impact the Agency?”

Mr. Brody viewed the overall impact of the *EPA Beyond the Horizon* report in a positive light. He described the genesis of the 1975 Office of Prevention, Pesticides and Toxic Substances report which was conducted by Peter Schwartz. He reported that the Agency brought in successful corporate scenario planners who could provide a corporate model incorporating both analysis and organizational change. He noted that successful corporate planning was internally-based, but externally advised. In his opinion, the *EPA Beyond the Horizon* report was supposed to have led to an internal change than what it did.

Mr. Brody emphasized the need to build something that includes an external advice process. He reported that there were less than 10 staff working on futures efforts within the Agency in 1995. There is currently a network of 60 or more EPA staff who are involved with futures work. Some of these individuals are managers which indicates that it’s spreading intellectually.

Mr. Ballesteros reported on his assignment to investigate how Rockwell International Corporation identifies emerging trends and issues. He described the activities of *The Horizon Committee*, a futurist body at Rockwell International. The approach at Rockwell International is virtually identical to the scenario-building process as the EPA. They develop scenarios with various outcomes, describe variables that are incorporated into scenarios, create a matrix of the four types of options, consult with outside consultants and futurists, scan through current publications, etc. He also noted that *The Horizon Committee* has designed their white paper in the same manner as the NACEPT Emerging Trends and Issues Workgroup. They assign different portions to people, circulate the document, and try to build it into one white paper.

Mr. Ballesteros said that since the EPA already had a successful process and several future reports, the workgroup did not need to focus a lot on process. He emphasized the need to determine what

contribution the group can make to the Agency. He believes that the workgroup's perspective is unique because it is comprised of people who have a broader view than a panel of scientists and environmental experts. He suggested for the workgroup to embrace their uniqueness as a very well balanced panel from outside the beltway.

Mr. Brody agreed that the EPA has a lot of scientists and analysts, and recognized the need for people to identify other factors which are really driving the world. In his opinion, the value of this workgroup is that it provides a much broader point of view. He suggested that the group focus on the sociological phenomena that the Agency has to operate in. For example, the fate of genetically modified organisms (GMOs) is as much cultural as it is analytical. He referenced the scenario planning dialogue at the October 2000 Reinvention Action Council (RAC), and how most of the managers were interested in talking about the government in each world. They talked about the specifics of bio-technology in this world versus the others. He suggested that the workgroup focus on how the EPA will operate in the future.

Ms. Subra asked if the RAC is our audience, and if they will be receptive to our list of the emerging issues. Mr. Brody responded that it would be helpful to managers if we included ways that management could proceed in small steps toward needed changes. Ms. Altieri stated that the Chair of NACEPT requested that our workgroup submit a list of emerging trends and issues affecting the agency in the next five to ten years. After the review by the entire Council, the report would then be submitted to the RAC.

There was some discussion on the transition, marking the possibility of a time of change for the EPA. Despite the changing times, Dr. Wilson noted that the workgroup had already identified 18 issues and that the issues needed further definition. She suggested that the workgroup provide an approach involving real world examples where the issue may have a direct impact. She urged the group to write a short document, an initial snapshot of emerging issues and trends that could have an impact in the next administration.

The members then discussed the EPA process for addressing future issues and trends. Several members thought that a part of the draft report should include the EPA processes, both those that had already occurred and those that might be needed. Ms. Hixon commented that it would be sufficient to comment on EPA process and to focus on the emerging issues and trends. The group agreed that the EPA has a good process in place for identifying emerging trends and issues. In response, Mr. Brody stated that the OCFO futures process needs to be expanded by outside input. He also urged the workgroup to present a draft product soon, although it may be imperfect, in order to influence the transition.

Mr. Fees felt the report should recognize the EPA's futures work as well as visionary trends. The value of the former is for the EPA to have external stakeholder input on its processes.

Mr. Jones stressed that issues are going to emerge faster. He asked the following questions:

(1) Does the EPA have a process for making decisions with imperfect knowledge in times of rapid change? (2) Are these planning mechanisms the real agents of change in the EPA? He thought these questions should be dealt with internally within the EPA, and should be reflected in the report.

In response to the question about agents of change, Mr. Brody stated that the latest EPA strategic plan incorporates new commitments based on interface with outside groups. The strategic plan is primarily based on current work and its purpose is to advise the public what the EPA is doing. The futures work is different because it opens up the field. He acknowledged that it would be helpful to have a recommendation to continue and to improve the futures processes.

Mr. Kenney agreed that ownership and implementation are important, and that the report might mention ways to better improve the coordination between the EPA offices that work with futures. Mr. Ballesteros reinforced the idea that the EPA has instituted a good process in dealing with future issues. Mr. Fees

suggested to have a mechanism for interfacing with the Council.

Mr. Ballesteros then described the organization of the report as having two parts: I — Comments on the Process; and II — Emerging Trends. Dr. Acre added that the process should be more fully institutionalized within the EPA on a continual basis. It was suggested that Part I include: (A) importance of EPA's planning processes reviewed by the workgroup; (B) recognition and praise for EPA's efforts; (C) recommendations about the process, such as institutionalization and continuity of the processes, including the scenario-building and ownership processes.

Members agreed that OCFO had done an excellent job of futures planning processes, and they hoped the process would not become politicized and have continuity regardless of the administration.

Mr. Ballesteros provided an example of how businesses are fined by one administration for activities in labor relations which were legal under a previous administration.

Ms. Hixon asked the group to review the two lists of issues and see if there were any issues on Mr. Kenney's list that needed to be added to the workgroup's September list. Mr. Fees suggested that the three areas — drivers of environmental problems, information issues, and issues around environmental protection processes and institutionalization — would apply to each of the 18 specific issues identified previously by the workgroup. It was decided to use these three areas as context in an overview introduction to the list of topics.

Other areas of agreement included to list human capital under *substantive trends* and land use and demographic changes under *eco-systems management*. Ms. Subra suggested listing all of the emerging issues and trends on the first page and then going into more detail on the issues in subsequent pages. Mr. Sustich recommended to add *technology acceptance and adoption* to *substantive trends*, because there are a lot of barriers to making changes in environmental protection processes and to adopting new technologies. He also thought that the issues of compliance reporting and alternative dispute resolution fit better under *beyond control and command*. The members agreed with these changes.

Mr. Sustich described a program developed by the University of Illinois, called the *Adopt Program*, or the accelerated infusion of pollution prevention technology. The district, state, region, and the university are providing the technology as a demonstration project at no cost to industry. A new technology is tested in the field by industry competitors and observed by regulators in a controlled environment. This was an excellent way to test new technologies with perceived risks and increasing the adoption of new technologies.

Ms. Hixon asked the group to review the first paragraph of the report and to make final writing assignments. Members expressed a need to see a draft of the introductory paragraph within the next week and be able to review and comment on it. She asked the group about the number of future meetings necessary to accomplish the work. The workgroup agreed to meet again in early February. When a draft document was completed, the members proposed to send the report to the NACEPT Council first, with a recommendation that it be given to the RAC, the EPA administrator, and the transition team.

### **Discussion of the Interim Report and Issue Papers**

Ms. Hixon led the group in a discussion of the topics and issues in the draft interim report and the issue papers prepared by members. The first issue paper was the one on a *holistic approach to environmental management*, which was prepared by Ms. Hixon based on the ideas proposed by Mr. Marsh at the previous meeting. She asked for suggestions for additions or improvements, especially in the permit process area.

Mr. Ballesteros thought that *holistic permits*, similar to those being used in Europe, would be very helpful

to industries, because then there would be one permit granted for a facility that covers all of its environmental needs. The EPA could then look at pollution more holistically. Mr. Marsh agreed that *multi-media permitting* was needed, because every permitting agency has a different set of standards that do not correlate with each other. Mr. Jones identified that the problem is that there is no integration between divisions before permitting begins. A single identifier number and common files are basic management systems that allow a regulatory agency to look at one facility.

Ms. Subra commented that a sector approach reviews all of the permits required for a sector, and therefore it may be possible to do multi-media permitting. Mr. Sustich noted that the Agency had used multi-media rule-making in the pulp and paper industry, and this experience could be used as a case study to encourage the Agency to do further development in this area.

Ms. Hixon reported that she added *economic and organizational resources* under *holistic approaches*. This included looking at EPA's budget and other agency's financial resources in bringing about holistic approaches to environmental protection. The EPA could help facilitate broad goals and direct some economic resources to other organizations. Members agreed.

Dr. Henderson reiterated the need to include *land use and population* in *eco-system management*, but Ms. Hixon noted that these topics will be included in the introductory paragraph. She added that urban sprawl could certainly fit under that category. Mr. Henderson also suggested discussing multi-media approaches under *integrated knowledge of regions*.

Mr. Sustich requested an expansion of issues under *coordinated rule-making and holistic permitting*. Mr. Fees stated that most of the EPA's permitting programs are delegated to state and local authorities, and he asked if they could do multi-media permitting. Mr. Sustich replied that if a local entity has the permitting authority, they could do multi-media permitting. He thought that the workgroup should try to find examples of where this has been done.

Mr. Marsh provided an example of how coordinated rule-making was done under the Project XL programs. At the Intel project in Arizona they were provided the flexibility to look at the whole complex and its impact on the environment in relationship to all of the standards. The group decided to place *coordinated rule-making* under *holistic approaches*.

Mr. Ballesteros wrote the issue paper on *CERCLA and product take-back*. Ms. Hixon asked for comments and suggestions on these issue. Ms. Subra suggested that item 1.C. be strengthened to ensure that the number of Superfund sites would not be limited or the liability "sunseted," especially for those sites that don't have responsible parties. Mr. Jones thought that more emphasis should be given to the removal aspect of the program. He noted that there have been an untold number of voluntary clean-ups of polluted sites, just because companies don't want to get involved in court actions. In Kansas alone, he estimated that there were a large amount of voluntary clean-ups. Ms. Subra requested that *voluntary clean-up* be added to this section.

The next issue paper discussed was *geospacial information technology* written by Mr. Henderson. The advances in remote sensing and geospacial technologies are a major trend in terms of how everyone will be doing business in the future, not just EPA. If this technology is coupled with telecommunications changes, people will be able to get environmental intelligence data easily. Remote sensing allows for measuring and monitoring, integrating data sets, and predicting problems. This is the goal of the EPA's Office of Environmental Communications. It is important for the EPA to adopt the use of this technology so that private companies can also use it to generate information. He referred the members to review the following website, [www.spaceimaging.com](http://www.spaceimaging.com), to see a one-meter resolution view of Washington, D.C.

The major use of this technology would be to detect types of minerals in a watershed. The way of

mapping, measuring, and monitoring surface materials is going to change. Water sediments and algae can be mapped, but not water chemistry. NASA has a system which is focused on profiling chemistry in the atmosphere. Several companies are in the process of putting up satellites for remote sensing. One concern of industry is the “big brother” aspects of the EPA’s surveillance. Mr. Henderson said that if the technology was properly adopted, accepted, and utilized, it could be a great money-saver.

Ms. Subra remarked that state and federal agencies are reluctant to invest in this expensive technology for enforcement and monitoring. She acknowledged that use of this technology for compliance or enforcement has to be institutionalized through policy or regulations.

Dr. Henderson said he had been working with the EPA to have them adopt this technology for enforcement or for surface sampling selection. Mr. Jones added that an economic analysis of the cost-benefit of this technology ought to be included in a recommendation about remote sensing technology. Dr. Henderson agreed that economies of scale could be realized, because agencies could use the same geospatial maps.

The next issue paper was on *changing rhetoric from command and control to alternative dispute resolution*, which was written by Mr. Jones. The members were asked to provide input on *alternative strategies for problem pollutants*, a section addressed by Ms. Nellor. No suggestions were made to the paper on problem pollutants. An issue paper on *beyond command and control for other instruments* was provided by Ms. Subra. The issue was placed under the topic *substantive trends and themes*.

Ms. Hixon also asked whether *environmental justice* should be part of the report. Mr. Jones thought that this would be part of the CERCLA sunset section. Ms. Hixon emphasized the importance of the Appalachian Clean Streams initiative. Mr. Brody brought up the issue of global intelligence monitoring. For example, mercury pollution in the U. S. is now compounded by mercury coming from other countries.

Mr. Jones raised the problem of shifting priorities on pollutants, which in turn confuses the private sector. He called for better risk assessment and a better management strategy for determining which pollutants companies need to be concerned about. Dr. Henderson enforced this idea, because remote sensing could find even more problems and increase businesses’ liabilities. Ms. Subra asked to add an additional strategy to Ms. Nellor’s paper related to mercury, including sources outside the U. S. and to add a section that covers strategies for broader sources of environmental pollution. Mr. Henderson thought that *alternative strategies* should come under *beyond command and control*. Ms. Hixon stated that this issue paper could be subsumed under non-point pollution in the *beyond command and control* category.

## **Work Assignments for the Interim Report**

Ms. Altieri reviewed the topics to be addressed and asked members to volunteer for a specific topic. The following topics were assigned to the following workgroup members:

<u>Topics</u>	<u>Writers</u>
EMS Better performance measures	David Marsh
Communication issues	Charles Jones
Global warming and eco-systems	David Fees
Compliance reporting/communications	Richard Sustich

Environmental justice

Gary Ballesteros

Technology adoption

Fred Henderson, III

Agency processes

Carlos Arce

Mr. Ballesteros offered to be the overall editor and to bring all of the pieces together. Ms. Hixon graciously accepted his offer to be the workgroup editor. She commented that the EPA/OCEM has requested an editor in their budget, but it has not been approved to date.

At this point, *compliance reporting* was moved from *beyond control and command* to the topical area of *communications issues*, because it relates to reporting by computer communications to the public. Human capital would be an overarching issue in all of the other issues and not a separate issue. Ms. Altieri was asked to develop and circulate a new breakdown of the issues.

Mr. Henderson asked if he should revise his statement and add the suggestions from this meeting? Ms. Altieri suggested to include revisions, but to keep the paper brief.

A discussion ensued about the length of the paper and the attachments. It was decided to have a two-three page executive summary, including a list of the 18 issues. The issue papers could be one-two pages and attached to the executive summary. The interim report would be an outline for the white papers on each topic due in the Spring of 2001.

A time line was then determined for submission of the issue papers to Mr. Ballesteros. The workgroup agreed to send a draft of the interim report to Gwen Whitt by the end of November.

An executive summary of one-two pages and a one-two page summary of each topical issue were recommended by the members. Ms. Altieri stated that a teleconference would be needed to discuss the entire draft full report. Mr. Ballesteros agreed to circulate the draft interim report to workgroup members before the end of November for comments.

Ms. Altieri expressed appreciation to the members for their hard work and dedication.

The meeting was adjourned at 11:54 a.m.